

# MetaDataHeader Specification v4

*This document provides a specification to define machine-readable meta-data in part programs to support optimization steps in the subsequent processing. Compared to version 2 of the specification support for very long values was added for some of the metadataheaders by splitting lines. Also support for spaces in values was added. In version 3.1 the meta-data "end of plan" was added. In version 3.2 the meta-datas related to parts in the part program(Oil\_OrderQty, Oil\_PartProgramQty and Pl\_PartProgramQty) were added. In version 3.3 the meta-data "end of plan" was renamed to "planposition". In version 4.0 resetting variables after each block was introduced.*

## Context

Messer Cutting Systems is planning to improve processes and workflows in which MCS cutting machines are involved. As programs are a primary means of carrying information to the cutting machine and there is no widely accepted standard for transferring additional meta-data to the machine, MCS defines a such a standard for proprietary purposes to all nesting software providers.

In the remainder of this document we will use the terms MUST, MAY, and SHOULD are used as defined in RFC2119 (<https://www.ietf.org/rfc/rfc2119.txt>).

## Syntactic structure and processing of meta-data lines

Part programs are stored as text files in a line-oriented format. This standard specification introduces an additional tag to denote meta-data, encoded like:

```
#MSG SYN_ACK PLC["TEXT<number>=<metadata information>"].
```

Structurally, lines MUST start with the string #MSG SYN\_ACK PLC["TEXT<number>=( followed by a space-separated list of key-/value-pairs of the form <key>=<value> and MUST end with )"]. ⚠️ " and ) are not allowed inside values. The cutting machine will throw an error if " or ) are part of the value strings. <number> MUST be equal to or between 3 to 10. Values with spaces MUST be escaped with \". The length of key and value MUST not exceed 72 #MSG SYN\_ACK PLC["TEXT<number>=(MAX\_LENGTH\_72)"]

During part program execution, meta-data carrying lines are read by the PLC and the <metadata information> is stored in PLC variables. Variable changes can then be detected and recorded, together with a timestamp, by the OmniFab Machine Insight software. Each line containing meta-data adds around 20 ms of execution time to the total runtime of a part program.

## Keys

- Keys MUST be case-insensitive. but a preferred style of notation is camel-case, i.e. SHOULD start with an uppercase letter followed by a sequence of lowercase letters, uppercase letters, and digits: [ :uppercase: ] ( [ :lowercase: ] [ :uppercase: ] ) \*
- Key and value MUST NOT be empty. The dot is used as decimal separator.

There is no relation between meta-data and the <number>, with the exception that the numbers 9 and 10 MUST be used only after contour ends. This is due to transformations happening on the GC in which the exact position of a metadata line is lost. Only based on the number the decision can be made if a metadata line should be placed before or after a contour. The numbers 3 to 8 and 9 to 10 SHOULD be used alternating to ensure that there is enough time to read the values between overrides of variables.

After each group of MetaDataHeaders all variables used in that group must be reset. This is necessary for order info and order item info related data:

```
#MSG SYN_ACK PLC["TEXT4=(OrderInfo=\"286859-1 HDTL KW08\")"]
#MSG SYN_ACK PLC["TEXT5=(OI_OrderNoERP=\"\")"]
#MSG SYN_ACK PLC["TEXT6=(OI_Items=11)"]
#MSG SYN_ACK PLC["TEXT4="]
#MSG SYN_ACK PLC["TEXT5="]
#MSG SYN_ACK PLC["TEXT6="]
```

```

#MSG SYN_ACK PLC["TEXT4=(OrderItemInfo=\"286922-1 GL KW 08\")"]
#MSG SYN_ACK PLC["TEXT5=(OII_Pos=12)"]
#MSG SYN_ACK PLC["TEXT6=(OII_PartId=\"Mittelverstärkung - ENG-148171\")"]
#MSG SYN_ACK PLC["TEXT7=(OII_OrderQty=1 OII_Wgt=10.59 OII_Unit=kg)"]
#MSG SYN_ACK PLC["TEXT8=(OII_PartProgramQty=1)"]
#MSG SYN_ACK PLC["TEXT4="]
#MSG SYN_ACK PLC["TEXT5="]
#MSG SYN_ACK PLC["TEXT6="]
#MSG SYN_ACK PLC["TEXT7="]
#MSG SYN_ACK PLC["TEXT8="]

```

And this is also necessary for part related meta data:

```

#MSG SYN_ACK PLC["TEXT6=(PartRef=Begin)"]
#MSG SYN_ACK PLC["TEXT4=(OrderItemBegin=\"287049-1 UTL KW08\")"]
#MSG SYN_ACK PLC["TEXT5=(OIB_Pos=9)"]
#MSG SYN_ACK PLC["TEXT6=(OIB_PartId=\"Seitenverstärkung - ENG-236618\")"]
#MSG SYN_ACK PLC["TEXT4="]
#MSG SYN_ACK PLC["TEXT5="]
#MSG SYN_ACK PLC["TEXT6="]

```

Meta-data carrying lines MUST be added to the header of a program, i.e. included in the first lines of the file or right before the start or end of a contour of a part. To support nesting on the GC, it is necessary to end each part program by resetting all MetaDataHeaders. Therefor at the end of a part program all variables MUST be set to "" like in the following example:

```

(PlanFooterCommand)
#MSG SYN_ACK PLC["TEXT3="]
#MSG SYN_ACK PLC["TEXT4="]
#MSG SYN_ACK PLC["TEXT5="]
#MSG SYN_ACK PLC["TEXT6="]
#MSG SYN_ACK PLC["TEXT7="]
#MSG SYN_ACK PLC["TEXT8="]
#MSG SYN_ACK PLC["TEXT9="]
#MSG SYN_ACK PLC["TEXT10="]
M64
T0
M65
#CS OFF
M30

```

The following table describes the valid positions for each metadata information inside the part program.

metadata Information	Position	Regex
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<pre>#MSG SYN_ACK PLC["TEXT3=()"] to #MSG SYN_ACK PLC["TEXT8=()"]</pre>	<ul style="list-style-type: none"> <li>• At start of part program</li> <li>• Before the part it belongs to</li> </ul>	<pre>^\s*#MSG SYN_ACK PLC. *TEXT[ 3-8 ] { 1 } = { 1 } . *</pre>
<pre>#MSG SYN_ACK PLC["TEXT9=()"] and #MSG SYN_ACK PLC["TEXT10=()"]</pre>	<ul style="list-style-type: none"> <li>• After the part it belongs to</li> </ul>	<pre>^\s*#MSG SYN_ACK PLC. *TEXT( [ 9 ] { 1 }   [ 1 ] { 1 } [ 0 ] { 1 } ) = { 1 } . *</pre>

Example of a **valid** set of meta-data:

- #MSG SYN\_ACK PLC["TEXT3=(PlanId="2021-000406)"]
- #MSG SYN\_ACK PLC["TEXT5=(Material="ST52)"]
- #MSG SYN\_ACK PLC["TEXT6=(Thickness=20 Unit=mm)"]
- #MSG SYN\_ACK PLC["TEXT7=(PlateSize=4000x2500 Unit=mm)"]
- #MSG SYN\_ACK PLC["TEXT7=(Process="Plasma")"]
- #MSG SYN\_ACK PLC["TEXT8=(PlasmaCurrent=130 Unit=ampere)"]
- #MSG SYN\_ACK PLC["TEXT3=(PierceCount=1)"]
- #MSG SYN\_ACK PLC["TEXT4=(CuttingLength=8 Unit=in)"]
- #MSG SYN\_ACK PLC["TEXT5=(NumTorches=1,1)"]
- #MSG SYN\_ACK PLC["TEXT6=(PlateMaterial="MS")"]
- #MSG SYN\_ACK PLC["TEXT7=(PlannedTime=00:00:25)"]

Examples of **invalid** meta-data definitions:

- #MSG SYN\_ACK PLC["TEXT3=(PlanId="64028D07-S22") => Meta-tag incomplete
- #MSG SYN\_ACK PLC["TEXT1=(Material="MS")"] => Wrong number. Valid is 3 to 10.
- #MSG SYN\_ACK PLC["TEXT5=("Thickness"=0.25 Unit=in)"] => Key is quoted
- #MSG SYN\_ACK PLC["TEXT6=(PlateSize=12.6x12. )"] => Unit missing
- #MSG SYN\_ACK PLC["TEXT7=(Process="Plasma")"] => Closing parenthesis is missing

#### Detection of completed orders and cutting time capturing with and without common cuts.

Do determine if an order was produced completely, metadata items OrderInfo, OrderItemInfo and OrderItemBegin MUST be provided. If time per part or order should be recorded, then PartBegin or OrderItemBegin MUST be provided. In the case of common cuts the metadata PartBegin MUST be used.

## MetaDataHeader Specification

The following section specifies the metadata in the current version of the specification.

### Identifiers

This section specifies metadata to encode identifiers that can be used to uniquely identify nesting plans and derived part program instances. The specific encoding of the identifiers is up to the nesting software or other software generating part programs. Universally unique identifiers

(UUID) SHOULD be used for this purpose to avoid naming collisions. Multiple Identifiers can appear in one part program. This for example happens if multiple part programs are nested together on the cutting machine. All other metadata information are grouped by the last read planid in Omnifab Machine Insight.

Key	Type of Value	Mandatory	Description and Examples
PlanId	String	Yes. If not provided, no data for the whole plan will be collected.  ⚠ Needs to be the first metadata information for the whole plan.	Unique identifier for the nesting plan. Provided by the nesting software to allow for uniquely identify a nesting plan. It is recommended to use a UUID for this purpose. Together with the end of the program (M30) or the next plan id this defines the scope for all metadata related to a plan(planned cutting time for example).  <pre>#MSG SYN_ACK PLC["TEXT3=(PlanId=\" 2021-000406\")"]</pre>
InstanceId	String	No	Unique identifier for the instance of a nesting plan . A nesting plan may be instantiated into several programs each of which should have its own identifier. The identifier is provided by the nesting software to allow for uniquely identify an instance of a program. It is recommended to use a sequence number to be interpreted in the context of the PlanId or, alternatively, a UUID.  <pre>#MSG SYN_ACK PLC["TEXT3=(PlanId=\" 64028D07-S22\" InstanceId=1)"]</pre>
PlanPosition	String	No	Marker that must be set after the last part or a part program.  One scenario were this can be used is to add this marker after the last part of the part program and before an M00(stop of machine) and the remnant cut, that is usually added by the nesting software. If the remnant cut now is omitted and by this the part program not cut till the end, the line with the marker is still executed and all parts will be assumed as being produced. Without the marker, stopping the part program before the last line(M30) would result in the parts not being counted as produced.  <pre>#MSG SYN_ACK PLC["TEXT8=(PlanPosition=End)"] M00</pre>

### MetaData in the header of a part program

All metadata informations are optional. This metadata MUST be placed in the part program immediately after the plan id.

Key	Type of Value	Description and Examples
Material	String	A string describing the type of material. Possible values could be as described in standards like EN 10027-1 /2 or the SAE steel grades system. These can also be customer specific categories, e.g. when customers create their own terminology for classes of plate material.  <pre>#MSG SYN_ACK PLC["TEXT5=(Material=\"ST52\")"]</pre>

Thickness	Number , Unit	<p>Thickness of plate in a given unit. Possible units are "mm", "cm", "m", "in" and "ft".</p> <pre>#MSG SYN_ACK PLC[ "TEXT6=(Thickness=20 Unit=mm) " ]</pre>
PlateSize	Pair of number, Unit	<p>Size of the plate given as "size X" x "size Y". Possible units are "mm", "cm", "m", "in" and "ft".</p> <pre>#MSG SYN_ACK PLC[ "TEXT7=(PlateSize=4000x2500 Unit=mm) " ]</pre>
PlanWeight	Number , Unit	<p>The weight of a rectangular part enclosing all parts. Possible units are "kg", "lbs".</p> <pre>#MSG SYN_ACK PLC[ "TEXT8=(PlanWgt=1570 Unit=kg) " ]</pre>
PartsWeight	Number , Unit	<p>Weight of all parts. Possible units are "kg", "lbs".</p> <pre>#MSG SYN_ACK PLC[ "TEXT3=(PartsWgt=936.22 Unit=kg) " ]</pre>
Machine	String	<p>The planned machine on which this part program should be cut.</p> <pre>#MSG SYN_ACK PLC[ "TEXT4=(Machine=\ "AUTOGEN\ ") " ]</pre>
TotalCutLength	Number , Unit	<p>The total cutting length.</p> <pre>#MSG SYN_ACK PLC[ "TEXT8=(TotalCutLength=44.545 Unit=m) " ]</pre>
TotalMarkLength	Number , Unit	<p>The total marking length.</p> <pre>#MSG SYN_ACK PLC[ "TEXT3=(TotalMarkLength=0 Unit=m) " ]</pre>

PierceCount	Number	The number of pierces in the part program.  <pre>#MSG SYN_ACK PLC[ "TEXT5=(PierceCount=17) " ]</pre>
Process	String	A string describing the process to be used in cutting the program.  <pre>#MSG SYN_ACK PLC[ "TEXT3=(Process=\"HPR260XD\") " ]</pre>
PlannedTime	Time	Total time that the nesting software estimates the execution of the program on the given machine will take. Time MUST be always provided in the format HH:MM:SS (hours, minutes, seconds).  <pre>#MSG SYN_ACK PLC[ "TEXT6=(PlannedTime=01:49:33) " ]</pre>
PlannedCuttingSpeed	String	The planned cutting speed.  <pre>#MSG SYN_ACK PLC[ "TEXT7=(PlannedCuttingSpeed=0.33 Unit=in/sec) " ]</pre>
PlasmaCurrent	Number	Value of the current of the plasma source in Amperage (A) unit.  <pre>#MSG SYN_ACK PLC[ "TEXT4=(PlasmaCurrent=130 Unit=Ampere) " ]</pre>
NumTorches	Number Integer (min), Number Integer (max)	Planned number minimum and maximum torches to use for cutting during the execution of the given program.  <pre>#MSG SYN_ACK PLC[ "TEXT6=(NumTorches=2,4) " ]</pre>

OrderInfo	String, String, Number	<p>Unique identifier for the order in the nesting software system.</p> <div data-bbox="500 186 1435 537" style="border: 1px solid black; padding: 10px;"><pre>#MSG SYN_ACK PLC[ "TEXT4=(OrderInfo=\"286859-1 HDTL KW08\" )" ] #MSG SYN_ACK PLC[ "TEXT5=(OI_OrderNoERP=\"\")" ] #MSG SYN_ACK PLC[ "TEXT6=(OI_Items=11)" ] #MSG SYN_ACK PLC[ "TEXT4=" ] #MSG SYN_ACK PLC[ "TEXT5=" ] #MSG SYN_ACK PLC[ "TEXT6=" ]</pre></div> <ul style="list-style-type: none"><li>• OrderInfo is the number of the order in the nesting software.</li><li>• OI_OrderNoERP the number of the order in the ERP system.</li><li>• OI_Items describes the total amount of different items in the order.</li></ul>
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<p>OrderItemInfo</p> <p>String, String, String, Number , Number , Unit</p>	<p>OrderItemInfo describes one item of the order of which one part is included in the part program..</p> <div style="border: 1px solid black; padding: 10px; margin: 10px 0;"> <pre>#MSG SYN_ACK PLC[ "TEXT4=(OrderItemInfo=\ "286922-1 GL KW 08\)" ] #MSG SYN_ACK PLC[ "TEXT5=(OII_Pos=12) " ] #MSG SYN_ACK PLC[ "TEXT6=(OII_PartId=\ " Mittelverstärkung - ENG-148171\)" ] #MSG SYN_ACK PLC[ "TEXT7=(OII_OrderQty=1 OII_Wgt=10. 59 OII_Unit=kg) " ] #MSG SYN_ACK PLC[ "TEXT8=(OII_PartProgramQty=1) " ] #MSG SYN_ACK PLC[ "TEXT4=" ] #MSG SYN_ACK PLC[ "TEXT5=" ] #MSG SYN_ACK PLC[ "TEXT6=" ] #MSG SYN_ACK PLC[ "TEXT7=" ] #MSG SYN_ACK PLC[ "TEXT8=" ]</pre> <p>or if an order can have only one position per part id:</p> <pre>#MSG SYN_ACK PLC[ "TEXT4=(OrderItemInfo=\ "286922-1 GL KW 08\)" ] #MSG SYN_ACK PLC[ "TEXT6=(OII_PartId=\ " Mittelverstärkung - ENG-148171\)" ] #MSG SYN_ACK PLC[ "TEXT7=(OII_OrderQty=1 OII_Wgt=10. 59 OII_Unit=kg) " ] #MSG SYN_ACK PLC[ "TEXT8=(OII_PartProgramQty=1) " ] #MSG SYN_ACK PLC[ "TEXT4=" ] #MSG SYN_ACK PLC[ "TEXT5=" ] #MSG SYN_ACK PLC[ "TEXT6=" ] #MSG SYN_ACK PLC[ "TEXT7=" ] #MSG SYN_ACK PLC[ "TEXT8=" ]</pre> </div> <ul style="list-style-type: none"> <li>• OrderItemInfo is the number of the order in the nesting software.</li> <li>• OII_Pos is the position of the item in the order. Only mandatory if an order can contain the same part id in multiple positions.</li> <li>• OII_PartId is the part id.</li> <li>• OII_OrderQty describes the total amount of this part in the order.</li> <li>• OII_Wgt describes the weight of one part. Possible units are "kg", "lbs".</li> <li>• OII_Unit describes the unit of the weight.</li> <li>• OII_PartProgramQty describes the number of parts in this part program.</li> </ul>
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PartInfo	String, Number , Number , Unit	<p>Details of one part of the part program which is <b>not</b> part of an order.</p> <div style="border: 1px solid black; padding: 10px; margin: 10px 0;"> <pre>#MSG SYN_ACK PLC[ "TEXT5=(PartInfo=\"283746-234\")" ] #MSG SYN_ACK PLC[ "TEXT6=(PI_PartProgramQty=20 PI_Wgt=1 PI_Unit=kg)" ] #MSG SYN_ACK PLC[ "TEXT5=" ] #MSG SYN_ACK PLC[ "TEXT6=" ]</pre> </div> <ul style="list-style-type: none"> <li>• PartInfo describes the part id.</li> <li>• PI_PartProgramQty is the total number of parts of this part in the part program. It is <b>not</b> the quantity of parts in the order.</li> <li>• PI_Wgt describes the weight of one of this parts. Possible units are "kg", "lbs".</li> <li>• PI_Unit describes the unit of the weight.</li> </ul>
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### MetaData right before the begin of a contour

All metadata informations are optional. This metadata **MUST** be placed right before the begin of a contour.

Key	Type of Value	Description and Examples
PartRef=Begin	String	<p>PartRef marks the beginning of the list of parts of the contour and is used for all processes. For example not only for cutting but also for drilling, marking etc.</p> <pre>#MSG SYN_ACK PLC[ "TEXT3=(PartRef=Begin)" ]</pre> <p>If commen cuts are used, PartRef=Begin is needed to be able to split cutting time between parts.</p>
PartBegin	String	<p>PartBegin describes which parts, which do <b>not</b> belong to an order, are part of the contour.</p> <div style="border: 1px solid black; padding: 10px; margin: 10px 0;"> <pre>#MSG SYN_ACK PLC[ "TEXT3=(PartBegin=\"283746-234\")" ] #MSG SYN_ACK PLC[ "TEXT5=" ]</pre> </div> <p>PartBegin describes the part id.</p>

OrderItemBegin	String	<p>OrderItemBegin describes which parts, that belong to an order, are part of the contour.</p> <pre>#MSG SYN_ACK PLC["TEXT6=(PartRef=Begin)"] #MSG SYN_ACK PLC["TEXT4=(OrderItemBegin=\"287049-1 UTL KW08\")"] #MSG SYN_ACK PLC["TEXT5=(OIB_Pos=9)"] #MSG SYN_ACK PLC["TEXT6=(OIB_PartId=\" Seitenverstärkung - ENG-236618\")"] #MSG SYN_ACK PLC["TEXT4="] #MSG SYN_ACK PLC["TEXT5="] #MSG SYN_ACK PLC["TEXT6="]</pre> <p>or, if an order can have only one position per part id,:</p> <pre>#MSG SYN_ACK PLC["TEXT6=(PartRef=Begin)"] #MSG SYN_ACK PLC["TEXT4=(OrderItemBegin=\"287049-1 UTL KW08\")"] #MSG SYN_ACK PLC["TEXT6=(OIB_PartId=\" Seitenverstärkung - ENG-236618\")"] #MSG SYN_ACK PLC["TEXT4="] #MSG SYN_ACK PLC["TEXT5="] #MSG SYN_ACK PLC["TEXT6="]</pre> <p>OrderItemBegin describes the order id, OIB_Pos the position of this part in the order and OIB_PartId the part id.</p> <p>OIB_Pos is only mandatory if an order can contain the same part id in multiple positions.</p>
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#### MetaData right after the end of a contour

All metadata informations are optional. This metadata MUST be placed directly after the contour end.

Key	Type of Value	Description and Examples
PartRef=End	String	<p>If commen cuts are used, PartRef=End can improve the splitting of cutting time between parts.</p> <pre>#MSG SYN_ACK PLC ["TEXT9= (PartRef=End)"]</pre>

#### Auxiliary Function

Key	Type of Value	Description and Examples
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AuxiliaryFunction	String	<p>Used to mark points of special interest in a part program. The current use case it to obtain timestamps when processes are enabled or the machine begins to cut a contour or contour element. Can occur anywhere in the part program.</p> <div style="border: 1px solid black; padding: 10px; margin: 10px 0;"> <pre>#MSG SYN_ACK PLC["TEXT3= (AuxiliaryFunction=LeadInStart)"]</pre> </div>
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### Metadata at the end of the part program


At the end of a part program all variables MUST be reset.

Description and Examples
<pre>#MSG SYN_ACK PLC["TEXT3="] #MSG SYN_ACK PLC["TEXT4="] #MSG SYN_ACK PLC["TEXT5="] #MSG SYN_ACK PLC["TEXT6="] #MSG SYN_ACK PLC["TEXT7="] #MSG SYN_ACK PLC["TEXT8="] #MSG SYN_ACK PLC["TEXT9="] #MSG SYN_ACK PLC["TEXT10="]</pre>

## OmniWin Straight PP Configuration

Only OmniWin OW20.2.0155 supports most of in this document described meta data headers. To include the data into the part programs the post processors have to be configured. This section only describes how this is done for the straight post processors. For all other post processor support from Messer is needed for the configuration. To configure the straight post processors to include meta data headers set dlog to true (SET\_DLOG\_ON=1) and replace everything after SET\_DLOG\_ON=1 up until ;SET\_BEG\_REMNANTCUT with the content of this file:

[http://download.machine-insight.messersoft.com/MI\\_MetaDataSource\\_OmniWin\\_StraightPP\\_Configuration.txt](http://download.machine-insight.messersoft.com/MI_MetaDataSource_OmniWin_StraightPP_Configuration.txt)

 Don't open the file in the browser and copy the content. This might result in additional line breaks. Instead download the whole file by saving the link.

## Example Program

```
( PP_NAME=          PP_Din)
( PP_VERSION=      4.0)
( PP_INI_NAME=     GC_OXY_MTORCH_4.7.ini)
( PP_INI_VERSION= 2014-11-10)
( PLANNAME=       2021-000406)
( MACHINE=        ALFA_1217_P_ACT_A221)
( MATERIAL=       ST52)
( THICKNESS=      20)
#MSG SYN_ACK PLC["TEXT3=(PlanId=\"2021-000406\")"]
#MSG SYN_ACK PLC["TEXT4=(Machine=\"AUTOGEN\")"]
#MSG SYN_ACK PLC["TEXT5=(Material=\"ST52\")"]
#MSG SYN_ACK PLC["TEXT6=(Thickness=20 Unit=mm)"]
#MSG SYN_ACK PLC["TEXT7=(PlateSize=4000x2500 Unit=mm)"]
#MSG SYN_ACK PLC["TEXT8=(PlanWgt=1570 Unit=kg)"]
```

```
#MSG SYN_ACK PLC["TEXT3=(PartsWgt=936.22 Unit=kg)"]
#MSG SYN_ACK PLC["TEXT4=(OrderInfo=\"286859-1 HDTL KW08\")"]
#MSG SYN_ACK PLC["TEXT5=(OI_OrderNoERP=\"\")"]
#MSG SYN_ACK PLC["TEXT6=(OI_Items=11)"]
#MSG SYN_ACK PLC["TEXT4="]
#MSG SYN_ACK PLC["TEXT5="]
#MSG SYN_ACK PLC["TEXT6="]
#MSG SYN_ACK PLC["TEXT4=(OrderInfo=\"286963-1 HDTL KW 08\")"]
#MSG SYN_ACK PLC["TEXT5=(OI_OrderNoERP=\"\")"]
#MSG SYN_ACK PLC["TEXT6=(OI_Items=6)"]
#MSG SYN_ACK PLC["TEXT4="]
#MSG SYN_ACK PLC["TEXT5="]
#MSG SYN_ACK PLC["TEXT6="]
#MSG SYN_ACK PLC["TEXT4=(OrderInfo=\"287198-1 XHDTL KW08\")"]
#MSG SYN_ACK PLC["TEXT5=(OI_OrderNoERP=\"\")"]
#MSG SYN_ACK PLC["TEXT6=(OI_Items=15)"]
#MSG SYN_ACK PLC["TEXT4="]
#MSG SYN_ACK PLC["TEXT5="]
#MSG SYN_ACK PLC["TEXT6="]
#MSG SYN_ACK PLC["TEXT4=(OrderInfo=\"287044-1 UTL KW08\")"]
#MSG SYN_ACK PLC["TEXT5=(OI_OrderNoERP=\"\")"]
#MSG SYN_ACK PLC["TEXT6=(OI_Items=12)"]
#MSG SYN_ACK PLC["TEXT4="]
#MSG SYN_ACK PLC["TEXT5="]
#MSG SYN_ACK PLC["TEXT6="]
#MSG SYN_ACK PLC["TEXT4=(OrderInfo=\"287049-1 UTL KW08\")"]
#MSG SYN_ACK PLC["TEXT5=(OI_OrderNoERP=\"\")"]
#MSG SYN_ACK PLC["TEXT6=(OI_Items=11)"]
#MSG SYN_ACK PLC["TEXT4="]
#MSG SYN_ACK PLC["TEXT5="]
#MSG SYN_ACK PLC["TEXT6="]
#MSG SYN_ACK PLC["TEXT4=(OrderInfo=\"287039-1 UTL KW08\")"]
#MSG SYN_ACK PLC["TEXT5=(OI_OrderNoERP=\"\")"]
#MSG SYN_ACK PLC["TEXT6=(OI_Items=18)"]
#MSG SYN_ACK PLC["TEXT4="]
#MSG SYN_ACK PLC["TEXT5="]
#MSG SYN_ACK PLC["TEXT6="]
#MSG SYN_ACK PLC["TEXT4=(OrderInfo=\"286922-1 GL KW 08\")"]
#MSG SYN_ACK PLC["TEXT5=(OI_OrderNoERP=\"\")"]
#MSG SYN_ACK PLC["TEXT6=(OI_Items=16)"]
#MSG SYN_ACK PLC["TEXT4="]
#MSG SYN_ACK PLC["TEXT5="]
#MSG SYN_ACK PLC["TEXT6="]
#MSG SYN_ACK PLC["TEXT4=(OrderItemInfo=\"286922-1 GL KW 08\")"]
#MSG SYN_ACK PLC["TEXT5=(OII_Pos=12)"]
#MSG SYN_ACK PLC["TEXT6=(OII_PartId=\"Mittelverstärkung - ENG-148171\")"]
#MSG SYN_ACK PLC["TEXT7=(OII_OrderQty=1 OII_Wgt=10.59 OII_Unit=kg)"]
#MSG SYN_ACK PLC["TEXT8=(OII_PartProgramQty=1)"]
#MSG SYN_ACK PLC["TEXT4="]
```

```
#MSG SYN_ACK PLC["TEXT5="]
#MSG SYN_ACK PLC["TEXT6="]
#MSG SYN_ACK PLC["TEXT7="]
#MSG SYN_ACK PLC["TEXT8="]
#MSG SYN_ACK PLC["TEXT4=(OrderItemInfo=\"287049-1 UTL KW08\")"]
#MSG SYN_ACK PLC["TEXT5=(OII_Pos=10)"]
#MSG SYN_ACK PLC["TEXT6=(OII_PartId=\"AH_Lasche_Links - ENG-215109\")"]
#MSG SYN_ACK PLC["TEXT7=(OII_OrderQty=1 OII_Wgt=12.01 OII_Unit=kg)"]
#MSG SYN_ACK PLC["TEXT8=(OII_PartProgramQty=1)"]
#MSG SYN_ACK PLC["TEXT4="]
#MSG SYN_ACK PLC["TEXT5="]
#MSG SYN_ACK PLC["TEXT6="]
#MSG SYN_ACK PLC["TEXT7="]
#MSG SYN_ACK PLC["TEXT8="]
#MSG SYN_ACK PLC["TEXT4=(OrderItemInfo=\"287049-1 UTL KW08\")"]
#MSG SYN_ACK PLC["TEXT5=(OII_Pos=8)"]
#MSG SYN_ACK PLC["TEXT6=(OII_PartId=\"Rückwand - ENG-236614\")"]
#MSG SYN_ACK PLC["TEXT7=(OII_OrderQty=1 OII_Wgt=106.45 OII_Unit=kg)"]
#MSG SYN_ACK PLC["TEXT8=(OII_PartProgramQty=1)"]
#MSG SYN_ACK PLC["TEXT4="]
#MSG SYN_ACK PLC["TEXT5="]
#MSG SYN_ACK PLC["TEXT6="]
#MSG SYN_ACK PLC["TEXT7="]
#MSG SYN_ACK PLC["TEXT8="]
#MSG SYN_ACK PLC["TEXT4=(OrderItemInfo=\"287044-1 UTL KW08\")"]
#MSG SYN_ACK PLC["TEXT5=(OII_Pos=11)"]
#MSG SYN_ACK PLC["TEXT6=(OII_PartId=\"AH_Lasche_Rechts - ENG-215145\")"]
#MSG SYN_ACK PLC["TEXT7=(OII_OrderQty=1 OII_Wgt=11.8 OII_Unit=kg)"]
#MSG SYN_ACK PLC["TEXT8=(OII_PartProgramQty=1)"]
#MSG SYN_ACK PLC["TEXT4="]
#MSG SYN_ACK PLC["TEXT5="]
#MSG SYN_ACK PLC["TEXT6="]
#MSG SYN_ACK PLC["TEXT7="]
#MSG SYN_ACK PLC["TEXT8="]
#MSG SYN_ACK PLC["TEXT4=(OrderItemInfo=\"287049-1 UTL KW08\")"]
#MSG SYN_ACK PLC["TEXT5=(OII_Pos=11)"]
#MSG SYN_ACK PLC["TEXT6=(OII_PartId=\"AH_Lasche_Rechts - ENG-215107\")"]
#MSG SYN_ACK PLC["TEXT7=(OII_OrderQty=1 OII_Wgt=11.81 OII_Unit=kg)"]
#MSG SYN_ACK PLC["TEXT8=(OII_PartProgramQty=1)"]
#MSG SYN_ACK PLC["TEXT4="]
#MSG SYN_ACK PLC["TEXT5="]
#MSG SYN_ACK PLC["TEXT6="]
#MSG SYN_ACK PLC["TEXT7="]
#MSG SYN_ACK PLC["TEXT8="]
#MSG SYN_ACK PLC["TEXT4=(OrderItemInfo=\"287049-1 UTL KW08\")"]
#MSG SYN_ACK PLC["TEXT5=(OII_Pos=9)"]
#MSG SYN_ACK PLC["TEXT6=(OII_PartId=\"Seitenverstärkung - ENG-236618\")"]
#MSG SYN_ACK PLC["TEXT7=(OII_OrderQty=2 OII_Wgt=26.85 OII_Unit=kg)"]
#MSG SYN_ACK PLC["TEXT8=(OII_PartProgramQty=2)"]
```

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#MSG SYN_ACK PLC["TEXT4="]
#MSG SYN_ACK PLC["TEXT5="]
#MSG SYN_ACK PLC["TEXT6="]
#MSG SYN_ACK PLC["TEXT7="]
#MSG SYN_ACK PLC["TEXT8="]
#MSG SYN_ACK PLC["TEXT4=(OrderItemInfo=\"287039-1 UTL KW08\")"]
#MSG SYN_ACK PLC["TEXT5=(OII_Pos=14)"]
#MSG SYN_ACK PLC["TEXT6=(OII_PartId=\"Seitenverstärkung - ENG-236631\")"]
#MSG SYN_ACK PLC["TEXT7=(OII_OrderQty=2 OII_Wgt=19.85 OII_Unit=kg)"]
#MSG SYN_ACK PLC["TEXT8=(OII_PartProgramQty=1)"]
#MSG SYN_ACK PLC["TEXT4="]
#MSG SYN_ACK PLC["TEXT5="]
#MSG SYN_ACK PLC["TEXT6="]
#MSG SYN_ACK PLC["TEXT7="]
#MSG SYN_ACK PLC["TEXT8="]
#MSG SYN_ACK PLC["TEXT4=(OrderItemInfo=\"287044-1 UTL KW08\")"]
#MSG SYN_ACK PLC["TEXT5=(OII_Pos=8)"]
#MSG SYN_ACK PLC["TEXT6=(OII_PartId=\"Seitenverstärkung - ENG-236684\")"]
#MSG SYN_ACK PLC["TEXT7=(OII_OrderQty=2 OII_Wgt=19.16 OII_Unit=kg)"]
#MSG SYN_ACK PLC["TEXT8=(OII_PartProgramQty=2)"]
#MSG SYN_ACK PLC["TEXT4="]
#MSG SYN_ACK PLC["TEXT5="]
#MSG SYN_ACK PLC["TEXT6="]
#MSG SYN_ACK PLC["TEXT7="]
#MSG SYN_ACK PLC["TEXT8="]
#MSG SYN_ACK PLC["TEXT4=(OrderItemInfo=\"287044-1 UTL KW08\")"]
#MSG SYN_ACK PLC["TEXT5=(OII_Pos=10)"]
#MSG SYN_ACK PLC["TEXT6=(OII_PartId=\"AH_Lasche_Links - ENG-215146\")"]
#MSG SYN_ACK PLC["TEXT7=(OII_OrderQty=1 OII_Wgt=12 OII_Unit=kg)"]
#MSG SYN_ACK PLC["TEXT8=(OII_PartProgramQty=1)"]
#MSG SYN_ACK PLC["TEXT4="]
#MSG SYN_ACK PLC["TEXT5="]
#MSG SYN_ACK PLC["TEXT6="]
#MSG SYN_ACK PLC["TEXT7="]
#MSG SYN_ACK PLC["TEXT8="]
#MSG SYN_ACK PLC["TEXT4=(OrderItemInfo=\"286859-1 HDTL KW08\")"]
#MSG SYN_ACK PLC["TEXT5=(OII_Pos=5)"]
#MSG SYN_ACK PLC["TEXT6=(OII_PartId=\"Profil - ENG-155089\")"]
#MSG SYN_ACK PLC["TEXT7=(OII_OrderQty=1 OII_Wgt=171.7 OII_Unit=kg)"]
#MSG SYN_ACK PLC["TEXT8=(OII_PartProgramQty=1)"]
#MSG SYN_ACK PLC["TEXT4="]
#MSG SYN_ACK PLC["TEXT5="]
#MSG SYN_ACK PLC["TEXT6="]
#MSG SYN_ACK PLC["TEXT7="]
#MSG SYN_ACK PLC["TEXT8="]
#MSG SYN_ACK PLC["TEXT4=(OrderItemInfo=\"286963-1 HDTL KW 08\")"]
#MSG SYN_ACK PLC["TEXT5=(OII_Pos=4)"]
#MSG SYN_ACK PLC["TEXT6=(OII_PartId=\"Seitenverstärkung - ENG-
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235820\" )" ]
#MSG SYN_ACK PLC["TEXT7=(OII_OrderQty=2 OII_Wgt=25.97 OII_Unit=kg)"]
#MSG SYN_ACK PLC["TEXT8=(OII_PartProgramQty=1)"]
#MSG SYN_ACK PLC["TEXT4="]
#MSG SYN_ACK PLC["TEXT5="]
#MSG SYN_ACK PLC["TEXT6="]
#MSG SYN_ACK PLC["TEXT7="]
#MSG SYN_ACK PLC["TEXT8="]
#MSG SYN_ACK PLC["TEXT4=(OrderItemInfo=\"287198-1 XHDTL KW08\")"]
#MSG SYN_ACK PLC["TEXT5=(OII_Pos=10)"]
#MSG SYN_ACK PLC["TEXT6=(OII_PartId=\"Rückwand - ENG-236671\")"]
#MSG SYN_ACK PLC["TEXT7=(OII_OrderQty=1 OII_Wgt=176.94 OII_Unit=kg)"]
#MSG SYN_ACK PLC["TEXT8=(OII_PartProgramQty=1)"]
#MSG SYN_ACK PLC["TEXT4="]
#MSG SYN_ACK PLC["TEXT5="]
#MSG SYN_ACK PLC["TEXT6="]
#MSG SYN_ACK PLC["TEXT7="]
#MSG SYN_ACK PLC["TEXT8="]
#MSG SYN_ACK PLC["TEXT4=(OrderItemInfo=\"287044-1 UTL KW08\")"]
#MSG SYN_ACK PLC["TEXT5=(OII_Pos=9)"]
#MSG SYN_ACK PLC["TEXT6=(OII_PartId=\"Rückwand - ENG-236685\")"]
#MSG SYN_ACK PLC["TEXT7=(OII_OrderQty=1 OII_Wgt=99.35 OII_Unit=kg)"]
#MSG SYN_ACK PLC["TEXT8=(OII_PartProgramQty=1)"]
#MSG SYN_ACK PLC["TEXT4="]
#MSG SYN_ACK PLC["TEXT5="]
#MSG SYN_ACK PLC["TEXT6="]
#MSG SYN_ACK PLC["TEXT7="]
#MSG SYN_ACK PLC["TEXT8="]
#MSG SYN_ACK PLC["TEXT4=(OrderItemInfo=\"286859-1 HDTL KW08\")"]
#MSG SYN_ACK PLC["TEXT5=(OII_Pos=4)"]
#MSG SYN_ACK PLC["TEXT6=(OII_PartId=\"Rückwand - ENG-155091\")"]
#MSG SYN_ACK PLC["TEXT7=(OII_OrderQty=1 OII_Wgt=185.73 OII_Unit=kg)"]
#MSG SYN_ACK PLC["TEXT8=(OII_PartProgramQty=1)"]
#MSG SYN_ACK PLC["TEXT4="]
#MSG SYN_ACK PLC["TEXT5="]
#MSG SYN_ACK PLC["TEXT6="]
#MSG SYN_ACK PLC["TEXT7="]
#MSG SYN_ACK PLC["TEXT8="]
#MSG SYN_ACK PLC["TEXT8=(TotalCutLength=44.545 Unit=m)"]
#MSG SYN_ACK PLC["TEXT3=(TotalMarkLength=0 Unit=m)"]
#MSG SYN_ACK PLC["TEXT4=(TotalRapidMoveLength=15.297 Unit=m)"]
#MSG SYN_ACK PLC["TEXT5=(PierceCount=17)"]
#MSG SYN_ACK PLC["TEXT6=(PlannedTime=01:49:33)"]
#CONTOUR MODE [DEV_PATH_DEV=0.2 RELEVANT_PATH=0.1]
#TRC [CONV_CIR_TO_LIN=1]
G71
G90
#CS ON [V.A.ABS.X, V.A.ABS.Y, 0, 0, 0, V.E.ROTATION]
M190
G162
```

G141  
G237  
(CARRIAGE:+1ACT+300.00+2AACT)  
M00  
G00 X2882.76 Y1949.03  
M64  
T11  
M65  
#MSG SYN\_ACK PLC["TEXT6=(PartRef=Begin)"]  
#MSG SYN\_ACK PLC["TEXT4=(OrderItemBegin=\"287044-1 UTL KW08\")"]  
#MSG SYN\_ACK PLC["TEXT5=(OIB\_Pos=8)"]  
#MSG SYN\_ACK PLC["TEXT6=(OIB\_PartId=\"Seitenverstärkung - ENG-  
236684\")"]  
#MSG SYN\_ACK PLC["TEXT4="]  
#MSG SYN\_ACK PLC["TEXT5="]  
#MSG SYN\_ACK PLC["TEXT6="]  
G41 D11  
N1 M07 H1 H2  
G261  
G01 X2871.87 Y1965.80  
G01 X2836.02 Y1973.42  
G03 X2480.43 Y2028.44 I-328.20 J-944.61  
G02 X2478.38 Y2030.38 I-0.05 J2.00  
G01 X2478.26 Y2034.35  
G03 X2474.44 Y2040.94 I-8.00 J-0.24  
G01 X2381.10 Y2097.97  
G03 X2369.99 Y2100.32 I-8.86 J-14.51  
G03 X2047.94 Y1997.01 I126.43 J-947.73  
G03 X2040.27 Y1988.64 I7.97 J-15.01  
G01 X2036.18 Y1979.00  
G02 X2033.43 Y1978.00 I-1.84 J0.78  
G01 X2016.21 Y1986.77  
G02 X2015.34 Y1989.46 I0.91 J1.78  
G01 X2077.10 Y2110.66  
G01 X2052.22 Y2123.34  
G02 X2051.38 Y2126.10 I0.91 J1.78  
G01 X2074.26 Y2166.87  
G02 X2076.00 Y2167.89 I1.74 J-0.98  
G01 X2956.67 Y2167.89  
G02 X2958.63 Y2165.47 I0.00 J-2.00  
G01 X2917.39 Y1971.46  
G02 X2899.60 Y1959.91 I-14.67 J3.12  
G01 X2874.02 Y1965.34  
M50  
G01 X2871.87 Y1965.80  
G03 X2864.75 Y1961.18 I-1.25 J-5.87  
G260  
M08 H1 H2  
G40  
M51

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G00 X3625.16 Y1978.76
#MSG SYN_ACK PLC["TEXT6=(PartRef=Begin)"]
#MSG SYN_ACK PLC["TEXT4=(OrderItemBegin=\"287049-1 UTL KW08\")"]
#MSG SYN_ACK PLC["TEXT5=(OIB_Pos=9)"]
#MSG SYN_ACK PLC["TEXT6=(OIB_PartId=\"Seitenverstärkung - ENG-
236618\")"]
#MSG SYN_ACK PLC["TEXT4="]
#MSG SYN_ACK PLC["TEXT5="]
#MSG SYN_ACK PLC["TEXT6="]
G41 D11
N2 M07 H1 H2
G261
G01 X3612.01 Y1993.82
G03 X3394.15 Y1992.79 I-101.82 J-1496.54
G02 X3392.04 Y1995.20 I-0.15 J1.99
G01 X3392.44 Y1997.08
G03 X3389.02 Y2005.42 I-7.83 J1.66
G01 X3297.74 Y2065.68
G03 X3286.71 Y2068.41 I-9.37 J-14.19
G03 X2961.25 Y1976.40 I93.28 J-951.56
G03 X2959.37 Y1975.33 I7.45 J-15.28
G02 X2956.31 Y1977.35 I-1.10 J1.67
G03 X2949.94 Y1990.15 I-11.81 J2.10
G01 X2937.99 Y1996.24
G01 X3000.65 Y2119.22
G01 X2975.78 Y2131.89
G02 X2974.94 Y2134.65 I0.91 J1.78
G01 X2997.81 Y2175.42
G02 X2999.56 Y2176.44 I1.74 J-0.98
G01 X3979.00 Y2176.44
G02 X3980.96 Y2174.03 I-0.00 J-2.00
G01 X3934.53 Y1955.59
G02 X3916.73 Y1944.03 I-14.67 J3.12
G01 X3853.15 Y1957.55
G03 X3614.20 Y1993.67 I-342.97 J-1460.26
M50
G03 X3612.01 Y1993.82 I-104.02 J-1496.39
G03 X3605.61 Y1988.25 I-0.41 J-5.99
G260
M08 H1 H2
G40
M51
(CARRIAGE:+2AACT)
M00
G00 X991.78 Y1159.14
M64
T11
M65
#MSG SYN_ACK PLC["TEXT6=(PartRef=Begin)"]
#MSG SYN_ACK PLC["TEXT4=(OrderItemBegin=\"287044-1 UTL KW08\")"]
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#MSG SYN_ACK PLC["TEXT5=(OIB_Pos=9)"]
#MSG SYN_ACK PLC["TEXT6=(OIB_PartId=\"Rückwand - ENG-236685\")"]
#MSG SYN_ACK PLC["TEXT4="]
#MSG SYN_ACK PLC["TEXT5="]
#MSG SYN_ACK PLC["TEXT6="]
G41 D11
N3 M07 H2
G261
G01 X1005.92 Y1145.00
G01 X1277.89 Y1145.00
G01 X1277.89 Y15.00
G01 X717.89 Y15.00
G01 X717.89 Y1145.00
G01 X1003.72 Y1145.00
M50
G01 X1005.92 Y1145.00
G03 X1011.92 Y1151.00 IO.00 J6.00
G260
M08 H2
G40
M51
G00 X1579.65 Y1159.14
#MSG SYN_ACK PLC["TEXT6=(PartRef=Begin)"]
#MSG SYN_ACK PLC["TEXT4=(OrderItemBegin=\"287049-1 UTL KW08\")"]
#MSG SYN_ACK PLC["TEXT5=(OIB_Pos=8)"]
#MSG SYN_ACK PLC["TEXT6=(OIB_PartId=\"Rückwand - ENG-236614\")"]
#MSG SYN_ACK PLC["TEXT4="]
#MSG SYN_ACK PLC["TEXT5="]
#MSG SYN_ACK PLC["TEXT6="]
G41 D11
N4 M07 H2
G261
G01 X1593.79 Y1145.00
G01 X1892.89 Y1145.00
G01 X1892.89 Y15.00
G01 X1292.89 Y15.00
G01 X1292.89 Y1145.00
G01 X1591.59 Y1145.00
M50
G01 X1593.79 Y1145.00
G03 X1599.79 Y1151.00 IO.00 J6.00
G260
M08 H2
G40
M51
G00 X1831.61 Y1280.91
#MSG SYN_ACK PLC["TEXT6=(PartRef=Begin)"]
#MSG SYN_ACK PLC["TEXT4=(OrderItemBegin=\"286922-1 GL KW 08\")"]
#MSG SYN_ACK PLC["TEXT5=(OIB_Pos=12)"]
#MSG SYN_ACK PLC["TEXT6=(OIB_PartId=\"Mittelverstärkung - ENG-
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148171\)"]
#MSG SYN_ACK PLC["TEXT4="]
#MSG SYN_ACK PLC["TEXT5="]
#MSG SYN_ACK PLC["TEXT6="]
G41 D11
N5 M07 H2
G261
G01 X1811.62 Y1281.46
G02 X1536.59 Y1171.90 I-275.03 J290.44
G01 X1434.10 Y1171.90
G02 X1431.50 Y1173.40 IO.00 J3.00
G01 X1426.59 Y1181.90
G01 X1303.18 Y1181.90
G02 X1300.18 Y1184.90 IO.00 J3.00
G01 X1300.18 Y1186.26
G02 X1307.11 Y1197.13 I12.00 J-0.00
G01 X1343.22 Y1213.97
G02 X1372.43 Y1222.49 I42.26 J-90.63
G01 X1579.01 Y1249.68
G03 X1772.59 Y1348.45 I-42.42 J322.22
G03 X1735.01 Y1488.39 I-61.72 J58.44
G01 X1538.50 Y1546.60
G02 X1530.19 Y1555.49 I3.41 J11.51
G02 X1533.12 Y1559.15 I2.93 J0.65
G01 X1805.89 Y1559.15
G02 X1807.31 Y1558.79 I-0.00 J-3.00
G01 X1890.31 Y1514.11
G02 X1891.89 Y1511.33 I-1.42 J-2.64
G01 X1888.48 Y1433.29
G02 X1840.75 Y1312.12 I-199.81 J8.72
G02 X1813.21 Y1282.98 I-304.16 J259.78
M50
G02 X1811.62 Y1281.46 I-276.62 J288.93
G03 X1811.39 Y1272.98 I4.13 J-4.36
G260
M08 H2
G40
M51
G00 X1866.00 Y1632.71
#MSG SYN_ACK PLC["TEXT6=(PartRef=Begin)"]
#MSG SYN_ACK PLC["TEXT4=(OrderItemBegin=\"287049-1 UTL KW08\)")"]
#MSG SYN_ACK PLC["TEXT5=(OIB_Pos=10)"]
#MSG SYN_ACK PLC["TEXT6=(OIB_PartId=\"AH_Lasche_Links - ENG-215109\)")"]
#MSG SYN_ACK PLC["TEXT4="]
#MSG SYN_ACK PLC["TEXT5="]
#MSG SYN_ACK PLC["TEXT6="]
G41 D11
N6 M07 H2
G261
G01 X1856.29 Y1650.20
```

G02 X1620.50 Y1833.70 I110.00 J384.58  
G02 X1628.06 Y1840.03 I4.32 J2.51  
G03 X1655.03 Y1829.03 I30.35 J35.88  
G01 X1793.39 Y1819.07  
G01 X1801.87 Y1802.54  
G01 X1825.00 Y1814.41  
G01 X1672.11 Y2112.48  
G01 X1688.29 Y2120.78  
G02 X1691.11 Y2120.41 I1.14 J-2.22  
G01 X1895.62 Y1936.08  
G02 X1901.13 Y1928.92 I-16.74 J-18.57  
G01 X1985.63 Y1764.18  
G02 X1893.69 Y1641.42 I-76.41 J-38.58  
G02 X1858.41 Y1649.60 I72.60 J393.36  
M50  
G02 X1856.29 Y1650.20 I107.88 J385.18  
G03 X1848.87 Y1646.08 I-1.65 J-5.77  
G260  
M08 H2  
G40  
M51  
G00 X1612.88 Y2064.50  
#MSG SYN\_ACK PLC["TEXT6=(PartRef=Begin)"]  
#MSG SYN\_ACK PLC["TEXT4=(OrderItemBegin=\"287049-1 UTL KW08\")"]  
#MSG SYN\_ACK PLC["TEXT5=(OIB\_Pos=11)"]  
#MSG SYN\_ACK PLC["TEXT6=(OIB\_PartId=\"AH\_Lasche\_Rechts - ENG-215107\")"]  
#MSG SYN\_ACK PLC["TEXT4="]  
#MSG SYN\_ACK PLC["TEXT5="]  
#MSG SYN\_ACK PLC["TEXT6="]  
G41 D11  
N7 M07 H2  
G261  
G01 X1623.65 Y2070.02  
G03 X1622.40 Y2085.27 I-19.04 J6.13  
G03 X1595.48 Y2093.94 I-17.80 J-9.13  
G03 X1586.81 Y2067.02 I9.13 J-17.80  
G03 X1613.74 Y2058.35 I17.80 J9.13  
G03 X1622.86 Y2067.96 I-9.13 J17.80  
M50  
G03 X1623.65 Y2070.02 I-18.25 J8.18  
G03 X1619.77 Y2077.57 I-5.71 J1.84  
G260  
M08 H2  
G40  
M51  
G00 X1823.88 Y2178.71  
G41 D11  
N8 M07 H2  
G261  
G01 X1820.87 Y2158.94

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G02 X1844.52 Y2122.89 I-322.14 J-237.12
G02 X1836.97 Y2116.56 I-4.32 J-2.51
G03 X1809.99 Y2127.56 I-30.35 J-35.88
G01 X1671.63 Y2137.52
G01 X1663.15 Y2154.05
G01 X1640.02 Y2142.19
G01 X1792.91 Y1844.11
G01 X1776.73 Y1835.81
G02 X1773.91 Y1836.18 I-1.14 J2.22
G01 X1569.40 Y2020.51
G02 X1563.89 Y2027.67 I16.74 J18.57
G01 X1479.39 Y2192.41
G02 X1555.66 Y2316.59 I76.41 J38.58
G02 X1571.33 Y2315.17 I0.14 J-85.60
G02 X1819.56 Y2160.71 I-72.60 J-393.36
M50
G02 X1820.87 Y2158.94 I-320.83 J-238.89
G03 X1829.26 Y2157.66 I4.83 J3.56
G260
M08 H2
G40
M51
G00 X1906.76 Y2259.11
#MSG SYN_ACK PLC["TEXT6=(PartRef=Begin)"]
#MSG SYN_ACK PLC["TEXT4=(OrderItemBegin=\"286963-1 HDTL KW 08\")"]
#MSG SYN_ACK PLC["TEXT5=(OIB_Pos=4)"]
#MSG SYN_ACK PLC["TEXT6=(OIB_PartId=\"Seitenverstärkung - ENG-
235820\")"]
#MSG SYN_ACK PLC["TEXT4="]
#MSG SYN_ACK PLC["TEXT5="]
#MSG SYN_ACK PLC["TEXT6="]
G41 D11
N9 M07 H2
G261
G01 X1897.12 Y2276.63
G03 X1351.79 Y2330.81 I-418.45 J-1440.45
G02 X1349.84 Y2331.88 I-0.17 J1.99
G01 X1345.08 Y2341.12
G03 X1344.28 Y2341.94 I-1.78 J-0.92
G01 X1242.85 Y2399.17
G03 X1241.54 Y2399.40 I-0.98 J-1.74
G03 X912.79 Y2281.00 I154.15 J-943.62
G01 X894.71 Y2233.90
G02 X892.79 Y2234.41 I-0.93 J0.36
G03 X895.55 Y2268.70 I-217.86 J34.79
G01 X877.18 Y2277.27
G02 X876.22 Y2279.93 I0.85 J1.81
G01 X931.45 Y2398.37
G01 X906.12 Y2410.18
G02 X905.17 Y2412.88 I0.85 J1.81
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G01 X937.20 Y2477.04  
G02 X938.99 Y2478.15 I1.79 J-0.89  
G01 X1989.50 Y2478.15  
G02 X1991.27 Y2477.07 I0.00 J-2.00  
G01 X2018.56 Y2424.19  
G02 X1899.24 Y2276.04 I-92.42 J-47.69  
M50  
G02 X1897.12 Y2276.63 I26.89 J100.46  
G03 X1889.69 Y2272.54 I-1.67 J-5.76  
G260  
M08 H2  
G40  
M51  
G00 X2286.05 Y1890.72  
#MSG SYN\_ACK PLC["TEXT6=(PartRef=Begin)"]  
#MSG SYN\_ACK PLC["TEXT4=(OrderItemBegin=\"287044-1 UTL KW08\")"]  
#MSG SYN\_ACK PLC["TEXT5=(OIB\_Pos=10)"]  
#MSG SYN\_ACK PLC["TEXT6=(OIB\_PartId=\"AH\_Lasche\_Links - ENG-215146\")"]  
#MSG SYN\_ACK PLC["TEXT4="]  
#MSG SYN\_ACK PLC["TEXT5="]  
#MSG SYN\_ACK PLC["TEXT6="]  
G41 D11  
N10 M07 H2  
G261  
G01 X2304.77 Y1883.67  
G01 X2495.86 Y1970.20  
G02 X2504.63 Y1972.38 I10.31 J-22.77  
G01 X2689.42 Y1983.84  
G02 X2765.11 Y1850.47 I4.76 J-85.46  
G02 X2480.17 Y1677.04 I-331.49 J223.86  
G02 X2477.39 Y1686.50 I-0.58 J4.97  
G03 X2498.37 Y1707.01 I-20.73 J42.18  
G01 X2562.09 Y1829.66  
G01 X2580.68 Y1830.82  
G01 X2579.07 Y1856.77  
G01 X2244.71 Y1836.04  
G01 X2243.59 Y1854.19  
G02 X2245.05 Y1856.63 I2.50 J0.15  
G01 X2302.77 Y1882.76  
M50  
G01 X2304.77 Y1883.67  
G03 X2307.76 Y1891.61 I-2.48 J5.47  
G260  
M08 H2  
G40  
M51  
G00 X2227.52 Y1639.14  
#MSG SYN\_ACK PLC["TEXT6=(PartRef=Begin)"]  
#MSG SYN\_ACK PLC["TEXT4=(OrderItemBegin=\"287198-1 XHDTL KW08\")"]  
#MSG SYN\_ACK PLC["TEXT5=(OIB\_Pos=10)"]

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#MSG SYN_ACK PLC["TEXT6=(OIB_PartId=\"Rückwand - ENG-236671\")"]
#MSG SYN_ACK PLC["TEXT4="]
#MSG SYN_ACK PLC["TEXT5="]
#MSG SYN_ACK PLC["TEXT6="]
G41 D11
N11 M07 H2
G261
G01 X2241.66 Y1625.00
G01 X2607.89 Y1625.00
G01 X2607.89 Y15.00
G01 X1907.89 Y15.00
G01 X1907.89 Y1625.00
G01 X2239.46 Y1625.00
M50
G01 X2241.66 Y1625.00
G03 X2247.66 Y1631.00 I0.00 J6.00
G260
M08 H2
G40
M51
G00 X2263.25 Y1762.35
#MSG SYN_ACK PLC["TEXT6=(PartRef=Begin)"]
#MSG SYN_ACK PLC["TEXT4=(OrderItemBegin=\"287044-1 UTL KW08\")"]
#MSG SYN_ACK PLC["TEXT5=(OIB_Pos=11)"]
#MSG SYN_ACK PLC["TEXT6=(OIB_PartId=\"AH_Lasche_Rechts - ENG-215145\")"]
#MSG SYN_ACK PLC["TEXT4="]
#MSG SYN_ACK PLC["TEXT5="]
#MSG SYN_ACK PLC["TEXT6="]
G41 D11
N12 M07 H2
G261
G01 X2262.58 Y1774.43
G03 X2248.14 Y1779.50 I-13.34 J-14.90
G03 X2229.28 Y1758.42 I1.11 J-19.97
G03 X2250.35 Y1739.56 I19.97 J1.11
G03 X2269.21 Y1760.63 I-1.11 J19.97
G03 X2264.14 Y1772.88 I-19.97 J-1.11
M50
G03 X2262.58 Y1774.43 I-14.89 J-13.35
G03 X2254.11 Y1773.96 I-4.00 J-4.47
G260
M08 H2
G40
M51
G00 X2492.68 Y1781.33
G41 D11
N13 M07 H2
G261
G01 X2474.01 Y1788.50
G01 X2285.76 Y1704.74
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G02 X2276.98 Y1702.62 I-10.16 J22.84
G01 X2092.12 Y1692.39
G02 X2017.31 Y1826.25 I-4.19 J85.49
G02 X2303.39 Y1997.79 I330.01 J-226.04
G02 X2306.11 Y1988.32 I0.55 J-4.97
G03 X2284.99 Y1967.94 I20.45 J-42.32
G01 X2220.47 Y1845.72
G01 X2201.87 Y1844.69
G01 X2203.30 Y1818.73
G01 X2537.79 Y1837.25
G01 X2538.80 Y1819.09
G02 X2537.32 Y1816.66 I-2.50 J-0.14
G01 X2476.02 Y1789.39
M50
G01 X2474.01 Y1788.50
G03 X2470.97 Y1780.58 I2.44 J-5.48
G260
M08 H2
G40
M51
G00 X2916.17 Y1719.14
#MSG SYN_ACK PLC["TEXT6=(PartRef=Begin)"]
#MSG SYN_ACK PLC["TEXT4=(OrderItemBegin=\"286859-1 HDTL KW08\")"]
#MSG SYN_ACK PLC["TEXT5=(OIB_Pos=5)"]
#MSG SYN_ACK PLC["TEXT6=(OIB_PartId=\"Profil - ENG-155089\")"]
#MSG SYN_ACK PLC["TEXT4="]
#MSG SYN_ACK PLC["TEXT5="]
#MSG SYN_ACK PLC["TEXT6="]
G41 D11
N14 M07 H2
G261
G01 X2930.31 Y1705.00
G01 X3270.00 Y1705.00
G01 X3270.00 Y15.00
G01 X2622.89 Y15.00
G01 X2622.89 Y1705.00
G01 X2928.11 Y1705.00
M50
G01 X2930.31 Y1705.00
G03 X2936.31 Y1711.00 I0.00 J6.00
G260
M08 H2
G40
M51
G00 X3677.23 Y1719.14
#MSG SYN_ACK PLC["TEXT6=(PartRef=Begin)"]
#MSG SYN_ACK PLC["TEXT4=(OrderItemBegin=\"286859-1 HDTL KW08\")"]
#MSG SYN_ACK PLC["TEXT5=(OIB_Pos=4)"]
#MSG SYN_ACK PLC["TEXT6=(OIB_PartId=\"Rückwand - ENG-155091\")"]
#MSG SYN_ACK PLC["TEXT4="]
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#MSG SYN_ACK PLC["TEXT5="]
#MSG SYN_ACK PLC["TEXT6="]
G41 D11
N15 M07 H2
G261
G01 X3691.37 Y1705.00
G01 X3985.00 Y1705.00
G01 X3985.00 Y15.00
G01 X3285.00 Y15.00
G01 X3285.00 Y1705.00
G01 X3689.17 Y1705.00
M50
G01 X3691.37 Y1705.00
G03 X3697.37 Y1711.00 I0.00 J6.00
G260
M08 H2
G40
M51
G00 X3894.15 Y1831.85
#MSG SYN_ACK PLC["TEXT6=(PartRef=Begin)"]
#MSG SYN_ACK PLC["TEXT4=(OrderItemBegin=\"287039-1 UTL KW08\")"]
#MSG SYN_ACK PLC["TEXT5=(OIB_Pos=14)"]
#MSG SYN_ACK PLC["TEXT6=(OIB_PartId=\"Seitenverstärkung - ENG-
236631\")"]
#MSG SYN_ACK PLC["TEXT4="]
#MSG SYN_ACK PLC["TEXT5="]
#MSG SYN_ACK PLC["TEXT6="]
G41 D11
N16 M07 H2
G261
G01 X3877.38 Y1820.96
G01 X3859.29 Y1735.84
G02 X3835.57 Y1720.44 I-19.56 J4.16
G01 X3776.88 Y1732.91
G03 X3419.80 Y1782.92 I-314.97 J-949.10
G02 X3414.60 Y1787.68 I-0.21 J5.00
G01 X3414.34 Y1793.08
G01 X3315.23 Y1849.00
G03 X3304.04 Y1850.95 I-8.35 J-14.81
G03 X2981.42 Y1733.93 I159.43 J-942.74
G02 X2977.27 Y1735.09 I-1.51 J2.59
G03 X2972.16 Y1740.08 I-10.56 J-5.70
G01 X2964.66 Y1743.90
G02 X2962.48 Y1750.63 I2.27 J4.46
G01 X3022.85 Y1869.11
G01 X3000.76 Y1880.37
G02 X2998.66 Y1887.27 I2.27 J4.46
G01 X3019.15 Y1923.79
G02 X3023.51 Y1926.34 I4.36 J-2.45
G01 X3893.61 Y1926.34
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G02 X3898.50 Y1920.30 I-0.00 J-5.00
G01 X3877.84 Y1823.11
M50
G01 X3877.38 Y1820.96
G03 X3882.00 Y1813.84 I5.87 J-1.25
G260
M08 H2
G40
M51
#MSG SYN_ACK PLC["TEXT8=(PlanPosition=End)"]
G00 X681.40 Y11.40
M64
T12
M65
M50
G00 X681.43 Y1.40
G40
M07
G01 X681.40 Y11.40
M51
G01 X678.50 Y1176.58
G01 X1241.17 Y1182.44
G01 X1340.81 Y1261.57
G01 X1660.25 Y1317.25
G01 X1748.17 Y1413.96
G01 X1475.62 Y1537.04
G01 X1490.28 Y1607.38
G01 X1780.41 Y1613.24
G01 X1560.61 Y1809.59
G01 X1628.01 Y1909.23
G01 X1493.21 Y2046.97
G01 X1408.22 Y2290.21
G01 X1282.20 Y2307.80
G01 X1220.66 Y2357.62
G01 X895.36 Y2196.43
G01 X848.47 Y2234.53
G01 X868.21 Y2488.32
M50
G01 X868.99 Y2498.29
M08
M51
(PlanFooterCommand)
#MSG SYN_ACK PLC["TEXT3="]
#MSG SYN_ACK PLC["TEXT4="]
#MSG SYN_ACK PLC["TEXT5="]
#MSG SYN_ACK PLC["TEXT6="]
#MSG SYN_ACK PLC["TEXT7="]
#MSG SYN_ACK PLC["TEXT8="]
#MSG SYN_ACK PLC["TEXT9="]
#MSG SYN_ACK PLC["TEXT10="]
```

M64

T0

M65

#CS OFF

M30