

# Details, which make the difference.

The cutting nozzle is a vital part, as it is here that the laser beam and the cutting gas meet the workpiece. Choosing the right nozzle is therefore essential for the quality of your parts. Leave nothing to chance. Guarantee the best cut quality with Genuine Nozzles from TRUMPF.



# **Standard Nozzles**

"Made in Germany" – Genuine Nozzles are manufactured under strict quality specifications. They guarantee a faultless gas flow and a minimized burr formation. Furthermore, they are immediately ready to use thanks to tight production tolerances. This cancels complex centering processes.



#### **Standard Nozzle M12** Nozzle EAA



Standard Nozzle M8, not chrome-plated Nozzle ECE not chrome-plated

Name	Ø	Order-Nr.	Package size
EAA	0,8 mm	1324858	5 pcs.
	1,0 mm	1324860	5 pcs.
	1,2 mm	1324861	5 pcs.
	1,4 mm	1324863	5 pcs.
	1,7 mm	1324864	5 pcs.
	2,0 mm	1324865	5 pcs.
	2,3 mm	1324866	5 pcs.
	2,7 mm	1324867	5 pcs.

Annlicable with	the following '	TruLaser machines:
Applicable Will	LITE TOHOWING	II uLasci illacillics.

- 1030 fiber (L46 / L88), 1040 (L88), 1060 (L88), 2030 fiber (L72 / L82)
- 3030 (L20 / L55), 3030 Basic Edition (L77), 3030 Prime Edition (L75 / L77), 3030 Lean Edition, 3030 fiber (L49 / L81), 3040 (L32), 3040 Prime Edition (L70 / L79), 3040 fiber (L50 / L81), 3060 fiber (L66 / L81)
- 5030 (L16 / L52), 5030 fiber (L41 / L56 / L68 / L76), 5040 (L18 / L53), 5040 fiber (L47 / L57 / L69 / L76), 5060 (L19 / L54), 5060 fiber (L76)
- 7040 (L62), 8000 (L63)

#### Applicable with the following TruMatic machines:

■ 6000 (K05), 7000 (K02)



Standard Nozzle M6 Nozzle EBD

Name	Ø	Order-Nr.	Package size
EBD	0,8 mm	1354230	5 pcs.
	1,0 mm	0212334	5 pcs.
	1,2 mm	1479581	5 pcs.
	1,4 mm	0216199	5 pcs.
	1,7 mm	0225213	5 pcs.
	2,0 mm	1487009	5 pcs.
	2,3 mm	0126156	5 pcs.

#### **Applicable with the following TruLaser Tube machines:**

■ 3000, 5000 ( T01 / T05 / T08), 5000 fiber (T06), 7000 (T03 / T07)

Name	Ø	Order-Nr.	Package size
ECE	0,8 mm	0124561	5 pcs.
not chrome-	1,0 mm	0124562	5 pcs.
plated	1,2 mm	0966809	5 pcs.
	1,4 mm	0237497	5 pcs.
	1,7 mm	0237501	5 pcs.
	2,0 mm	1253211	5 pcs.
	2,3 mm	0126933	5 pcs.
	2,7 mm	0942742	5 pcs.

#### Applicable with the following TruLaser machines:

- 1030 (L22), 2025, 2030, 2510, 2525, 2530
- 3020, 3030, 3030 Basic Edition, 3030 Classic Edition, 3040, 3050, 3060
- **4030**, 4050
- 5030 Classic Edition, 5030 (L16)
- **6030, 6050**
- 7025, 7025 fiber (L43), 7040, 7040 fiber (L30), 8000

#### Applicable with the following TruMatic machines:

■ 3000 (K03), 3000 fiber (K04), 6000 (K01)



Standard Nozzle M8 Nozzle ECP

Name	Ø	Order-Nr.	Package size
ECP	0,8 mm	1851641	5 pcs.
	1,0 mm	1851587	5 pcs.
	1,2 mm	1851588	5 pcs.
	1,4 mm	1851618	5 pcs.
	1,7 mm	1851619	5 pcs.
	2,0 mm	1851620	5 pcs.
	2,3 mm	1851651	5 pcs.
	2,7 mm	1851652	5 pcs.

#### Applicable with the following TruLaser Tube machines:

■ 1000 fiber (K07), 6000 fiber (K06)



- Best cutting quality in every processing direction due to gas injection independent of direction
- Minimal cutting gas consumption thanks to precise geometry and tight production tolerances
- Best cutting result due to minimal sticking of slag spatter on the surface of the nozzle
- Made in Germany for unbeatable part quality

## Slim Nozzles

"Made in Germany" – Genuine Nozzles are manufactured under strict quality specifications. They guarantee a faultless gas flow and a minimized burr formation. Furthermore, they are immediately ready to use thanks to tight production tolerances. This cancels complex centering processes.



Slim Nozzle M12 Nozzle EAB

Name	Ø	Order-Nr.	Package size
EAB	0,8 mm	1373324	5 pcs.
	1,0 mm	1373325	5 pcs.
	1,2 mm	1373326	5 pcs.
	1,4 mm	1373327	5 pcs.
	1,7 mm	1373328	5 pcs.
	2,0 mm	1373329	5 pcs.
	2,3 mm	1373330	5 pcs.
	2,7 mm	1373331	5 pcs.

#### Applicable with the following TruLaser machines:

- 1030 fiber (L46 / L88), 1040 fiber (L88), 1060 fiber (L88), 2030 fiber (L72 / L82)
- 3030 (L20 / L55), 3030 Basic Edition (L77), 3030 Prime Edition (L75 / L77), 3030 Lean Edition, 3030 fiber (L49 / L81), 3040 (L32), 3040 Prime Edition (L70 / L79), 3040 fiber (L50 / L81), 3060 fiber (L66 / L81)
- 5030 (L16 / L52), 5030 fiber (L41 / L56 / L68 / L76), 5040 (L18 / L53), 5040 fiber (L47 / L57 / L69 / L76), 5060 (L19 / L54), 5060 fiber (L76)
- 7040 (L62), 8000 (L63)

#### Applicable with the following TruMatic machines:

■ 6000 (K05), 7000 (K02)



#### The benefits at a glance

- Slim Nozzles enable material savings due to tight nesting
- Allows closer processing with formed sections or tilted parts
- Minimal cutting gas consumption thanks to precise geometry and tight production tolerances



**Slim Nozzle M6** Nozzle EBF, EBG

Name	Ø	Order-Nr.	Package size
EBG	0,8 mm	0913799	5 pcs.
	1,0 mm	0913800	5 pcs.
	1,2 mm	1487034	5 pcs.
	1,4 mm	0913801	5 pcs.
EBF	1,7 mm	0937988	5 pcs.
	2,0 mm	1487036	5 pcs.
	2.3 mm	0937989	5 pcs.

### Applicable with the following TruLaser Tube machines:

■ 3000, 5000 (T01), 5000 (T05 / T08), 5000 fiber (T06), 7000 (T03 / T07)



- Made in Germany for unbeatable part quality
- Best cutting quality in every processing direction due to gas injection independent of direction
- Minimal cutting gas consumption thanks to precise geometry and tight production tolerances

## **Performance Nozzle**

The unique geometry of the nozzle contributes to a better quality of piercings, a lower burr formation and coloring of the sheet. Cutting with nitrogen leads to a significant increase in productivity. This is due to the increase of throughput depending on the sheet thickness, size and format.



Performance Düse M12 Düse EAU

Name	Ø	Order-Nr.	Package size
EAU	2,5 mm	2059462	5 pcs.
	3,0 mm	2060001	5 pcs.
	4,0 mm	2060004	5 pcs.
	6,0 mm	2060025	5 pcs.

### Applicable with the following TruLaser machines:

- 3030 Prime Edition (L75), 3030 fiber (L49 / L81), 3040 Prime Edition (L79), 3040 fiber (L50 / L81), 3060 fiber (L66 / L81)
- 5030 fiber (L68 / L76), 5040 fiber (L69 / L76), 5060 fiber (L76)



#### The benefits at a glance

- Significant qualitative leap, i.a. better piercings as well as minimal burr formation and coloring
- Substantial increase of productivity during cutting with nitrogen
- Unique internal geometry of the nozzle leads to an optimization of the cutting results

# **Chrome-plated Nozzle**

Customers not using the option PierceLine for their machine with a M8-thread can increase the robustness in case of a collision using the chrome-plated nozzle.



Standard Nozzle M8, chrome-plated Nozzle ECE

Name	Ø	Order-Nr.	Package size
ECE	0,8 mm	0352280	5 pcs.
chrome-	1,0 mm	0352281	5 pcs.
plated	1,2 mm	0352282	5 pcs.
	1,4 mm	0352283	5 pcs.
	1,7 mm	0352284	5 pcs.
	2,0 mm	1253212	5 pcs.
	2,3 mm	0352285	5 pcs.
	2,7 mm	0352286	5 pcs.

#### Applicable with the following TruLaser machines:

- 1030 (L22), 2025, 2030, 2510, 2525, 2530
- 3020, 3030, 3030 Basic Edition, 3030 Classic Edition, 3040, 3050, 3060
- **4030**, 4050
- 5030 (L16), 5030 Classic Edition
- **■** 6030, 6050
- 7025, 7040, 8000

### Applicable with the following TruMatic machines:

■ 3000 (K03), 3000 L, 6000 (K01), 6000 L



- Made in Germany for unbeatable part quality
- Best cutting quality in every processing direction due to gas injection independent of direction
- Minimal cutting gas consumption thanks to precise geometry and tight production tolerances

# **BrightLine Nozzle**

Thanks to BrightLine the laser beam can be customized to various sheet thicknesses without set-up. This leads to an optimal cutting quality with any material thickness. Due to a large focus diameter wide kerfs can be created. The parts will be cut safely out of the scrap skeleton and can be sorted easily and fast.



BrightLine Nozzle M12 Nozzle EAC, EAK, EAN, EAQ

Name	ø	Order-Nr.	Package size
EAN	1,7 mm	1664569	1 pc.
	2,0 mm	1664602	1 pc.
	2,5 mm	1664625	1 pc.
EAK	2,5 mm	1579549	1 pc.
	3,0 mm	1579556	1 pc.
	4,0 mm	1835747	1 pc.
EAC	5,3 mm	1633046	5 pcs.
EAQ	6,0 mm	1809091	1 pc.
	7,5 mm	1809421	1 pc.
	9,5 mm	1886199	1 pc.

### Applicable with the following TruLaser machines:

- 1030 fiber (L46 / L88), 1040 fiber (L88), 1060 fiber (L88), 2030 fiber (L72 / L82)
- 3030 (L20), 3030 Prime Edition (L75), 3030 Lean Edition, 3030 fiber (L49 / L81), 3040 (L32), 3040 Prime Edition (L79), 3040 fiber (L50 / L81), 3060 fiber (L66 / L81)
- 5030 (L16 / L52), 5030 fiber (L41 / L56 / L68 / L76), 5040 (L18 / L53), 5040 fiber (L47 / L57 / L69 / L76), 5060 (L19 / L54), 5060 fiber (L76)
- 7040 (L62), 8000 (L63)



#### The benefits at a glance

- Optimization of disturbances leading to an excellent edge quality
- Minimal cutting gas consumption due to the inside of the nozzle
- Very good results on the sheet thanks to advanced surface roughness

# **CoolLine Nozzle**

With the CoolLine Nozzle no heat will be collected within the mild steel even during cutting large material thicknesses. Due to water mist sprayed specifically coaxial around the processing point the material is cooled off. You will benefit from more finished parts per sheet, a decrease of material costs thanks to the use of regular mild steel or a more tight nesting.



# CoolLine Nozzle M12

Nozzle EGL

Package size: 1 pc.				
Name	Ø	Order-Nr.		
EGL (M12)	1,4 mm	1879940		
	1,7 mm	1879951		
	2,0 mm	1879952		
	2,3 mm	1879953		



#### **CoolLine Nozzle M28**

Nozzle EFL

Package size: 1 pc.			
Name	Ø	Order-Nr.	
EFL (M28)	1,4 mm	1774018	
	1,7 mm	1838745	
	2,0 mm	1774020	
	2,3 mm	1774092	

#### EGL applicable with the following TruLaser machines:

- 3030 (L20 ab Serienstand 09.00), 3030 Basic Edition (L77 ab Serienstand 03.00), 3030 Prime Edition (L77 ab Serienstand 03.00), 3030 Lean Edition (ab Serienstand 09.00), 3030 fiber (L49 / L81), 3040 (L32 ab Serienstand 09.00), 3040 Prime Edition (L70 ab Serienstand 03.00), 3040 fiber (L50 / L81), 3060 fiber (L66 / L81)
- 5030 (L52), 5030 fiber (L68 / L76), 5040 (L53), 5040 fiber (L69 / L76), 5060 (L54), 5060 fiber (L76)

#### EFL applicable with the following TruLaser machines:

- 3030 (L20 / L55), 3030 Basic Edition (L77), 3030 Prime Edition (L77), 3030 Lean Edition, 3040 (L32), 3040 Prime Edition (L70)
- 5030 (L16), 5040 (L18), 5060 (L19)
- 7040 (L62), 8000 (L63)



- The perfect cooling of the sheet allows a very narrow web width and delicate shapes on the thick sheet
- Precise nozzle holes ensure a high process stability thanks to an optimal water supply
- Lower part costs due to the reduction of reject parts with the help of CoolLine nozzles

# **Touchdown Nozzle**

Highspeed Eco – this stands for unrivaled speed in nitrogen cutting with a solid-state laser and the Touchdown Nozzle. The basis of this procedure is a patented nozzle design. The flow optimized nozzle reduces the gas consumption, the maximum pressure and it enables an improvement of sheet throughput. Furthermore, the three-part nozzle design also minimizes the costs. Regarding the future you will cut more parts in less time at lower costs and with even higher quality.



**Touchdown Nozzle M12** Nozzle EAV

Name	Ø	Order-Nr.	Package size
Nozzle EAV		2228806	1 pc.
Inner part	3,0 mm	2228802	5 pcs.
Sleeve		2284349	20 pcs.
Flat key		2228804	1 pc.

#### Applicable with the following TruLaser machines:

- 3030 fiber (L49 / L81), 3040 fiber (L50 / L81), 3060 fiber (L66 / L81)
- 5030 fiber (L68 / L76), 5040 fiber (L69 / L76), 5060 fiber (L76)



#### The benefits at a glance

- Increasing the sheet throughput up to 100% with the cutting process Highspeed Eco and the Touchdown Nozzle
- Reducing the cutting gas consumption by 70%. Direct touch down of the nozzle case on the sheet prevents the cutting gas to flow out on the sides
- Cost efficient exchange of Original Parts depending on wear with a modular concept
- Patented nozzle design

# **Bi-flow Nozzle**

Faster speed with less gas consumption – the flow optimized Bi-flow Nozzle in combination with the cutting process Highspeed reduce gas consumption during fusion cutting by 40% compared to the standard. This allows a doubling of sheet throughput thanks to optimized cutting data and increase of feed rate. At the same time, you will reach the best cutting quality in mild steel.



**Bi-flow Nozzle M12** Nozzle EAU

Name	Ø	Order-Nr.	Package size
EAU	10,0 mm	2253595	5 pcs.

#### Applicable with the following TruLaser machines:

- 3030 Prime Edition (L75), 3030 fiber (L49 / L81), 3040 Prime Edition (L79), 3040 fiber (L50 / L81), 3060 fiber (L66 / L81)
- 5030 fiber (L68 / L76), 5040 fiber (L69 / L76), 5060 fiber (L76)



- 40% less cutting gas consumption due to an optimized gas flow and a special nozzle geometry
- Increase in sheet throughput by up to 100% in combination with the cutting process Highspeed and the Bi-flow Nozzle
- Very high cutting quality

## **Bevel Cut Nozzle**

The integrated bevel cut makes the TruLaser 3000 Bevel Cut Edition a versatile standard machine. Thanks to the groundbreaking technology, you can create precise geometric shapes on the edge of the workpiece by cutting at an angle. This saves you up to 80% in processing time and costs for the entire assembly.



Bevel Cut Nozzle M12 Nozzle EAR

Name	Ø	Order-Nr.	Package size
EAR	1,0 mm	2936518	5 pcs.
	1,2 mm	2936519	5 pcs.
	1,4 mm	2936520	5 pcs.
	1,7 mm	2936571	5 pcs.
	2,0 mm	2936572	5 pcs.
	2,3 mm	2936573	5 pcs.
	2,7 mm	2936574	5 pcs.

#### Applicable with the following TruLaser machines:

• 3040 Bevel Cut Edition (L95), 3060 Bevel Cut Edition (L95), 3080 Bevel Cut Edition (L95)



#### The benefits at a glance

- With Bevel Cut, you can create delicate bevels and countersinks precisely and safely, even in thick structural steel
- Thanks to bevel cutting, you save on subsequent processes and therefore costs for the entire assembly
- Process a wide range of structural steel and stainless steel using bevel cutting and continue to cut all other materials using vertical cutting

# **FlexLine Nozzle**

High material tolerance, stable process: With FlexLine you achieve the best possible cutting results in structural steel of different grades. Thanks to the patented nozzle design and special cutting parameters, you can cut delicate contours safely even in thick sheet metal. This way you remain flexible and make optimal use of your material.



FlexLine Nozzle M12 Nozzle CGW

Name	Ø	Order-Nr.	Package size
CGW	1,4 mm	2815811	1 pcs.
	1,7 mm	2815863	1 pcs.
	2.0 mm	2815865	1 ncs

#### Applicable with the following TruLaser machines:

■ 1030 (L94), 1040 (L94), 1060 (L94), 3030 (L95), 3040 (L95), 3040 Bevel Cut Edition (L95), 3060 (L95), 3060 Bevel Cut Edition (L95), 3080 (L95), 3080 Bevel Cut Edition (L95), 5030 (L76), 5040 (L76), 5060 (L76)



- With FlexLine you can achieve high material tolerance and a low influence of the surface finish
- Thanks to the patented nozzle design and special cutting parameters, you can cut even delicate contours reliably and efficiently
- Optimize your part quality in medium to high sheet thicknesses

# **Reflection-free Nozzle**

Active Speed Control is a camera-based sensor system that monitors the cutting process of your 2D laser machine through the copper nozzle and automatically adjusts the feed. For this purpose, the use of a reflection-free nozzle is essential. This ensures that no reflections which interfere with the sensor system arise within the copper nozzle.



Reflection-free standard nozzle M12 Nozzle CAA

#### Reflection-free standard nozzle M12

Nozzle CAA

Name	Ø	Order- Nr.	Package size
CAA	0,8 mm	2488819	5 pcs.
	1,0 mm	2488864	5 pcs.
	1,2 mm	2472681	5 pcs.
	1,4 mm	2472683	5 pcs.
	1,7 mm	2488865	5 pcs.
	2,0 mm	2472684	5 pcs.
	2,3 mm	2488868	5 pcs.
	2,7 mm	2488902	5 pcs.

## Reflection-free touchdown nozzle M12

Nozzle CAV

Name	Ø	Order- Nr.	Package size
Nozzle		2493840	1 pc.
Inner part	3,0 mm	2493881	5 pcs.
Sleeve		2284349	20 pcs.

### Reflection-free bi-flow nozzle M12

Nozzle CAU

Name	Ø	Order- Nr.	Package Size
CAU	10.0 mm	2491660	5 pcs.

#### **Reflection-free CoolLine nozzle M12**

Nozzle CGL

Name	Ø	Order- Nr.	Package size
CGL	1.4 mm	2484583	1 pc.
	1,7 mm	2484629	1 pc.
	2,0 mm	2484725	1 pc.
	2,3 mm	2484771	1 pc.

### Applicable with the following TruLaser machines:

■ 5030 fiber (L76), 5040 fiber (L76), 5060 fiber (L76)



- Reliable cutting even with variable material
- Fewer work steps speed up production
- Laser cutting at the highest possible speed
- Increasing part quality with decreasing parts costs

