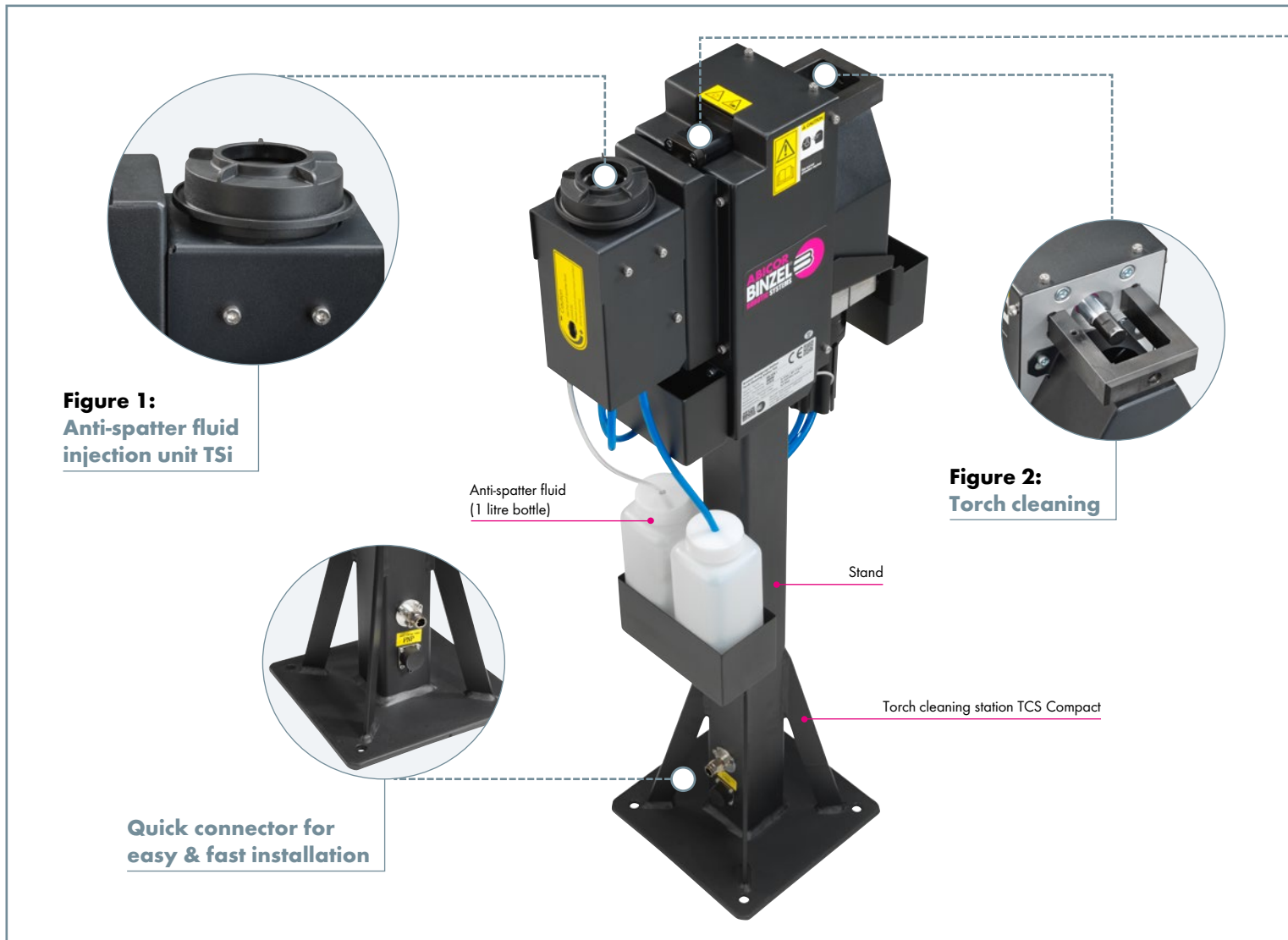


# TCS Compact Torch maintenance at it's best!



# Torch Cleaning Station "TCS Compact"

## System overview & technical data



**Figure 1:**  
Anti-spatter fluid  
injection unit TSi

**Figure 2:**  
Torch cleaning

**Quick connector for  
easy & fast installation**

### **TCS Compact.** The clever solution against spatter adhesion

The state-of-the-art torch cleaning station TCS Compact from ABICOR BINZEL stands for **quick and easy installation** to practically all robot brands and types, **top reliability and long life-time** due to high quality components, as well as **environmental friendliness and work shop safety** by fully covered maintenance functions.

Ensure **process stability** in automated welding by using preventive torch cleaning, wire cutting and anti-spatter spraying with TCS Compact!

Optimal and time saving cleaning of the gas nozzle for a reliable welding process and an increase in plant availability – torch maintenance at it's best ...

### **Figure 1:** Anti-spatter fluid injection unit TSi

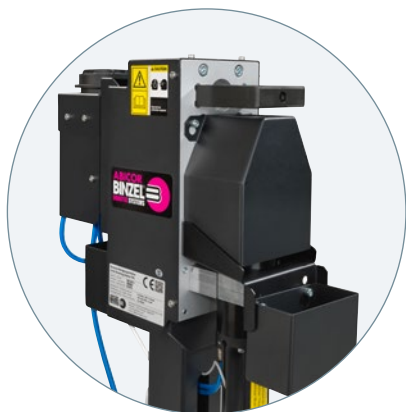
- Activated just by robot movement
- High efficient spray function
- Low consumption
- Collection of remaining anti-spatter fluid
- Fully protected for clean environment

### **Figure 2:** Torch cleaning

- Reamers, specially designed to suit the welding torch
- V-block for each nozzle diameter – no adjustments
- Strong, high quality air motor for powerful cleaning
- Complete dirt & dust protection



**Figure 3:**  
Wire cutting unit



**TCS Compact – fully covered and protected for a clean & safe environment**

**Figure 3:**  
Wire cutting unit

- Strong, reliable cutting device
- Sharp cut for save arc-start
- Hardened cutting knife for long lifetime



#### Technical data:

##### General data

Total weight: approx. 30 kg (long stand version),  
approx. 22 kg (short stand version)  
Ambient temperature: + 5 °C to + 50 °C

##### Pneumatic motor

Air consumption: approx. 400 l/min.  
Pneumatic motor /  
nominal speed  
with oiled air: approx. 650 rpm at 6 bar

##### Pneumatic connection

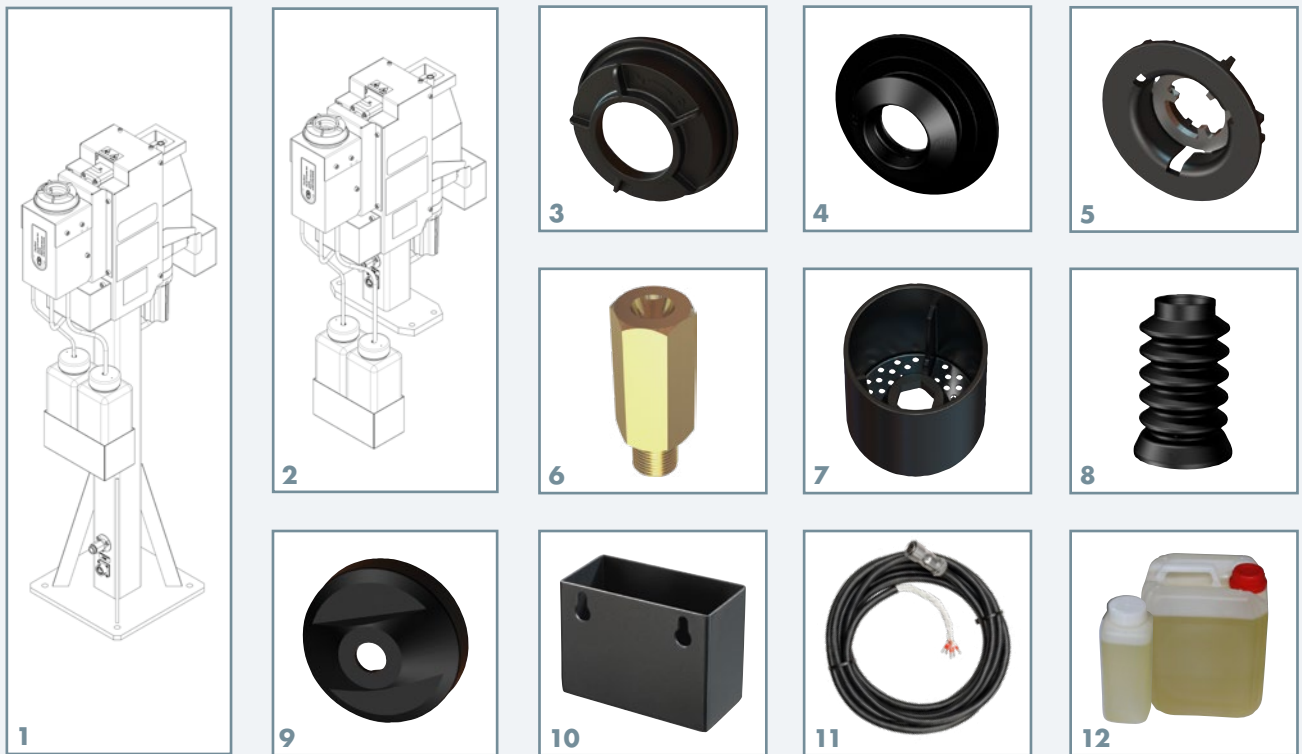
Connection OD: min. Ø 6 mm  
Nominal pressure: 6 bar  
Operating pressure: 6–8 bar  
Compressed air quality  
(ISO 8573-1:2010): at least class 4

##### Electrical clamping block

Input: 3 inputs for triggering the 5/2 directional  
control valves  
Control voltage: 24 V DC  
Power consumption: 2.8 W  
Output: 2 outputs from inductive proximity switch  
(normal open switch - PNP)  
Operating voltage: 10 – 30 V DC  
Continuous current: max. 100 mA  
Current consumption: approx. 14 mA (24 V)  
Max. wire diameter  
at 6 bar: 1.6 mm, solid wire

# Torch Cleaning Station "TCS Compact"

## Order information



### Cleaning Station TCS Compact

No.	Type	Part-No.
1	TCS COMPACT LP <sup>1</sup> /5M <sup>2</sup> /PNP <sup>3</sup>	830.2376.1
2	TCS COMPACT SP <sup>1</sup> /5M <sup>2</sup> /PNP <sup>3</sup>	830.2366.1

<sup>1</sup> Stand type: LP = long stand  
SP = short stand

<sup>2</sup> Connection cable length (5 meter)

<sup>3</sup> Proximity switch type (PNP)

Including: 1 set of sealing inserts (rubber), 5 meter signal cable and 1 litre anti-spatter fluid.  
Please order the reamer and V-block separately.

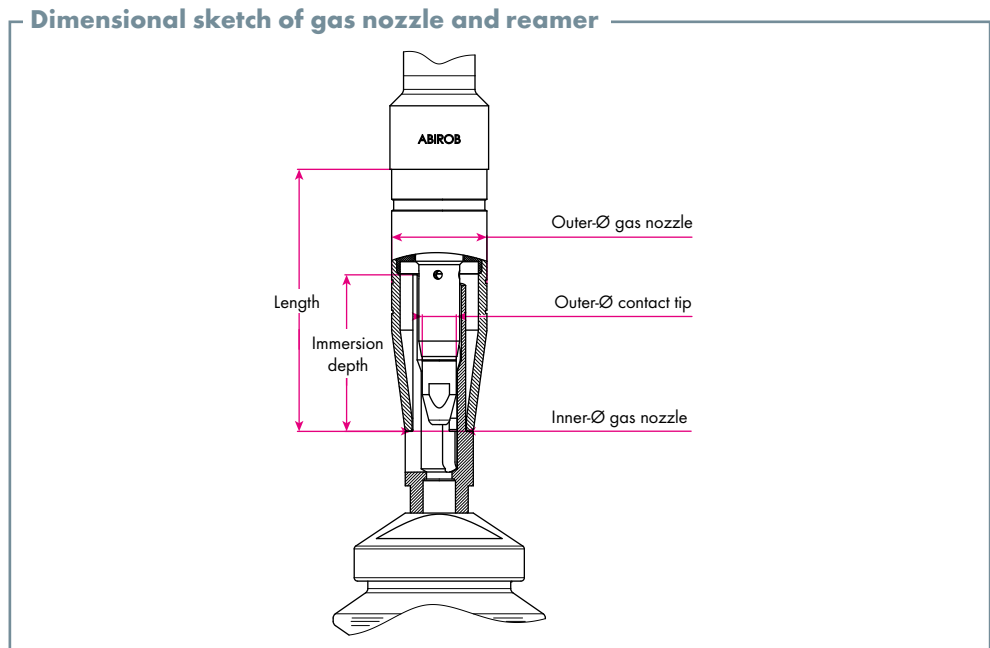
### Spare Parts for Cleaning Station TCS Compact

No.	Type	Description	Part-No.
3	Device cover	Device cover with bayonet fitting	830.2237.1
4	Sealing insert: Ø 20 mm	Seal for the gas nozzle	830.2232.1
	Ø 24 mm		830.2233.1
	Ø 30 mm		830.2234.1
5	Pressure flange	Contact surface of the gas nozzle for spray pulse activation	830.2265.1
6	Spray nozzle	Spare spray nozzle	830.2133.1
7	Collecting tank	Collecting tank and filter for excess anti-spatter fluid	830.2240.1
8	Rubber bellows	Rubber bellows for air motor	830.2104.1
9	Protection cap	Protection cap for air motor	830.2103.1
10	Collect box	Wire collect box	830.2120.1
11	Signal cable	TCS control lead cpl.: 5 m	101.0250.1
		10 m	101.0251.1
		15 m	101.0252.1
		20 m	101.0253.1
12	Anti-spatter fluid	1 litre bottle	192.0056
		5 litre canister	192.0052



# Torch Cleaning Station "TCS Compact"

## Reamer and V-block



### Torch series ABIROB® 350 GC and ABIROB® G 350

Torch type	with gas nozzle Type	Outer-Ø [mm]	Inner-Ø [mm]	Length [mm]	Immersion depth [mm]	with contact tip Thread	Outer-Ø	V-block Part-No.	Reamer Part-No.
ABIROB® 350 GC	145.0557	20.0	15.5	89.5	49.0	M6	8.0 mm	830.2356.1	830.2170.1
	145.0558	20.0	12.0	89.5	32.5	M6	8.0 mm	830.2356.1	830.2169.1
	145.0573	20.0	13.0	89.5	32.0	M6	8.0 mm	830.2356.1	830.2193.1

### Torch series ABIROB® A

Torch type	with gas nozzle Type	Outer-Ø [mm]	Inner-Ø [mm]	Length [mm]	Immersion depth [mm]	with contact tip Thread	Outer-Ø	V-block Part-No.	Reamer Part-No.
ABIROB® A 360	145.0599	22.0	12.0	68.0	16.5	M6	8.0 mm	830.2358.1	830.2199.1
	145.0600	22.0	12.0	70.0	16.5	M6	8.0 mm	830.2358.1	830.2199.1
	145.0601	22.0	12.0	65.0	16.5	M6	8.0 mm	830.2358.1	830.2199.1
	145.0597	22.0	14.0	65.0	43.0	M6	8.0 mm	830.2358.1	830.2207.1
	145.0619	22.0	14.0	65.0	43.0	M6	8.0 mm	830.2358.1	830.2207.1
	145.0592	22.0	16.0	68.0	47.0	M6	8.0 mm	830.2358.1	830.2165.1
	145.0593	22.0	16.0	70.0	47.0	M6	8.0 mm	830.2358.1	830.2165.1
	145.0594	22.0	16.0	65.0	38.0	M6	8.0 mm	830.2358.1	830.2166.1

V-block and reamer for other gas nozzles on request.

# Torch Cleaning Station "TCS Compact"

## Reamer and V-block

### Torch series ABIROB® A

Torch type	with	Outer- Ø	Inner- Ø	Length	Immersion depth	with		V-block Part-No.	Reamer Part-No.
	gas nozzle Type					contact tip Thread	Outer-Ø		
ABIROB® A 500	145.0589	28.0	13.0	75.0	18.0	M6	8.0 mm	830.2361.1	830.2187.1
	145.0590	28.0	13.0	77.0	18.0	M6	8.0 mm	830.2361.1	830.2187.1
	145.0588	28.0	14.0	72.0	45.0	M6	8.0 mm	830.2361.1	830.2207.1
	145.0580	28.0	16.0	75.0	46.0	M8	10.0 mm	830.2361.1	830.2164.1
	145.0581	28.0	16.0	77.0	46.0	M8	10.0 mm	830.2361.1	830.2164.1
	145.0583	28.0	16.0	75.0	46.0	M8	10.0 mm	830.2361.1	830.2164.1
	145.0584	28.0	16.0	77.0	46.0	M8	10.0 mm	830.2361.1	830.2164.1

### Torch series ABIROB® W

Torch type	with	Outer- Ø	Inner- Ø	Length	Immersion depth	with		V-block Part-No.	Reamer Part-No.
	gas nozzle Type					contact tip Thread	Outer-Ø		
ABIROB® W 300	145.0564	25.0	13.0	48.5	18.0	M6	8.0 mm	830.2359.1	830.2187.1
ABIROB® W 500	145.0479	25.0	13.0	75.5	19.7	M8	10.0 mm	830.2359.1	830.2190.1
	145.0556	25.0	13.0	77.5	19.7	M8	10.0 mm	830.2359.1	830.2190.1
	145.0466	25.0	15.5	72.0	35.0	M8	10.0 mm	830.2359.1	830.2188.1
	145.0568	25.0	15.5	72.5	35.0	M8	10.0 mm	830.2359.1	830.2188.1
	145.0553	25.0	15.5	75.5	39.0	M8	10.0 mm	830.2359.1	830.2168.1
	145.0544	25.0	15.5	75.5	39.0	M8	10.0 mm	830.2359.1	830.2168.1
	145.0480	25.0	15.5	77.0	39.0	M8	10.0 mm	830.2359.1	830.2168.1
ABIROB® W 600	145.0616	25.0	20.0	75.5	36.5	M8	10.0 mm	830.2359.1	830.2189.1
ABIROB® W 600	145.0689.5	30.0	18.0	92.0	23.0	M12	12.0 mm	830.2363.1	830.2263.1

### Available V-Block

Torch type	Ø	Part-No.
	22.0 mm	830.2358.1
Reamers for other torch	26.0 mm	830.2365.1
types, as well as for other	27.0 mm	830.2360.1
torch brands, on request.	29.0 mm	830.2362.1
	34.0 mm	830.2364.1



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