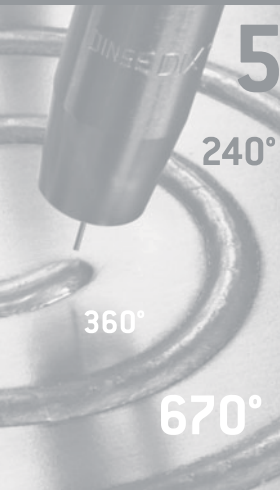


900°



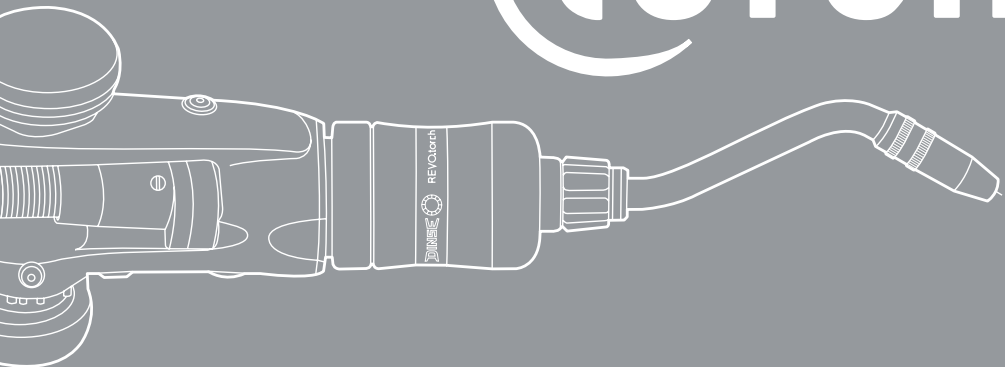
580°

MIG/MAG



© North-Schneider Population, Capital & Co. KG
Welding torch, welding machine

REVO torch





Infinite rotation, maximum availability – gas/liquid-cooled.



DINSE REVO.torch opens up a new dimension of robotic welding. The distinguishing features of this technology are its unlimited mobility, optimal component accessibility, minimal wear and low service costs with maximum performance and operational safety.

Infinite rotation

The DINSE rotary interface allows unlimited rotation of the welding torch, without having to rotate the torch set. The decisive advantage: The programming costs for complex robot movements with return paths is a thing of the past.

Doubly separable

Unique DINSE feature: The welding torch set is carried directly in the robotic arm but can be easily separated, both at the wire feeder and at the rotary interface. The wire feeding inside the torch set is completely insulated and ensures safe welding current transfer to the contact tip.

Unique design

DINSE is the only manufacturer that equips all of its torch sets with separate shield gas and air blast hoses. This prevents loss of gas and allows the welding to be started immediately after air blast without losing any time for purging.

Absolutely safe

An important part of the rotary interface is DINSE's crash protection system which provides a class leading degree of safety with a deflection range of up to 15°. The automatic, precision reset to the TCP ensures problem-free operation. An optional shock sensor switch is also available to protect the tools and the machine.

Innovative cooling

The DINSE **double-circuit liquid cooling** flows through the torch head along its entire length by means of an annular arrangement of longitudinal channels. The contact tip and gas nozzle are both cooled in parallel.

In the DINSE **gas cooling** system, the shield gas is concentrically channeled to the contact tip and as a result the welding torch draws off large amounts of heat.

Exceptional precision

The greatest precision and reproducibility are achieved with plug-in contact tips which can be re-positioned exactly to the same point. The dirt-resistant trapezoidal threads of the gas nozzle provide ideal heat transfer.

15°



DINSE REVO.torch – a system for all types of robots.

The DINSE REVO.torch makes conventional MIG/MAG welding faster, more flexible and more cost-effective for robots with an integrated welding cable. Shorter welding cycles increase efficiency.

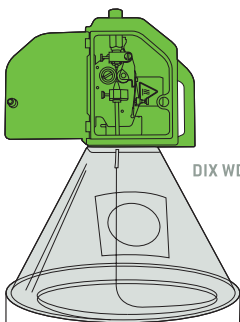
All DINSE products – from the torch head and wire feeder to the torch cleaning station – combine the highest quality and perfect compatibility. DINSE enables complex robotic welding with the system.

DINSE GREENline

The proven wire feeder for the highest demands and precision wire feeding can be used both for gas and liquid cooling. Compact contours ensure unrestricted motion.

- light, sturdy and fully insulated by the plastic housing
- compatible with all regular power sources
- uniform and powerful torque across the entire speed range
- optional: DIX REMO 100 integrated protective module for shock sensor
- can be combined with various spool housings

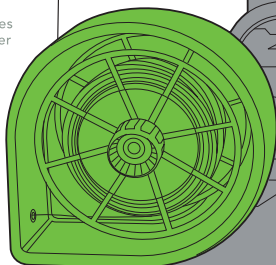
DIX WD 650 XT



DIX WD 300

The PUSH drive ensures constant wire feed over long distances.

Depending on the requirement, the DIX WD 300 can be installed on large spools or bulk wire packs.



DIX WDS 300

REVO.torch rotary interface with docking set

The DINSE rotary interface can be adapted with no problems to all regular types of robots by means of special docking sets.

DIX RET(Z) 300 (600)

Torch cleaning station

No work stoppage is required for quick and thorough cleaning of weld spatters from the interior of the gas nozzle.

- automatic integration of the cleaning procedure into the work process
- longer lifespan of wearing parts
- increased availability of the robot



DIX PRS 600



DINSE REVO.torch – minimized wear.

DINSE REVO.torch is the first torch to guarantee infinite turning of the welding torches even with liquid cooling, which means that robotic welding has limitless flexibility.

Well-known companies that give highest priority to trouble-free production rely on the liquid-cooled REVO.torch. Important advantages: The low wear part rate and a significantly reduced need for storage.

▼ Torch heads: 4 variants – swan neck at 30° or with angles: 0°, 22°, 45° each

Three angles plus a swan neck

◀ The DINSE REVO.torch heads are available as a swan neck at 30° to the robot's axis [8] or with bend angles of 0° [0], 22° [2] or 45° [4].

Safe reproducibility

When changing between 0°, 22° and 45° torch heads and a 30° swan neck, a consistent TCP for gas and liquid cooling is always guaranteed.

TCP (Tool Center Point)

100% duty cycle

▼ DIX METZ 59[4]
CO₂: 400 A
MIX: 350 A

rotary interface

DIX RETZ 600

▼ DIX METZ 52[8]
CO₂: 350 A
MIX: 300 A

Torch set

DIX RETZ 610 - x

Separate media feed

The separate shield gas feed prevents gas loss and enables welding to be started directly after air blast without losing time for purging.

Torch set

DIX RETZ 610 - x

Can be quickly converted

The DINSE GREENLine wire feeder can be used to save time and costs for either type of cooling.



DINSE REVO.torch – optimized compatibility.

With REVO.torch – especially for gas-cooled welding, DINSE has developed a new series of torch heads, which have the same TCP as those with liquid cooling. Thanks to the standard interface at the rotary interface, these are compatible with all gas-cooled DINSE torch sets.

Thus, you can adapt your welding tool in multi-faceted ways to different tasks and change it depending on the requirement.

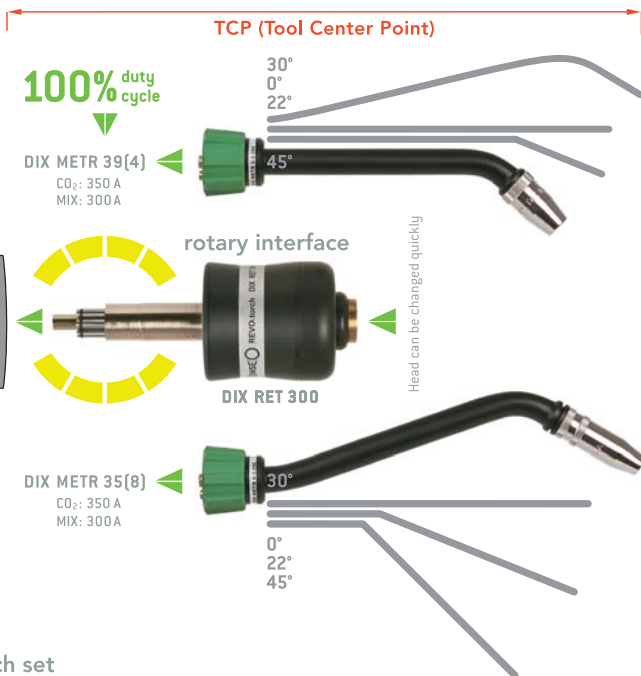
for any component geometry

The swan neck torch head was specially developed for the REVO.torch system and it adds to the user-friendliness by virtue of its optimal shape.

▼ Torch heads: 2 variants – swan neck at 30° or with angles: 0°, 22°, 45° each

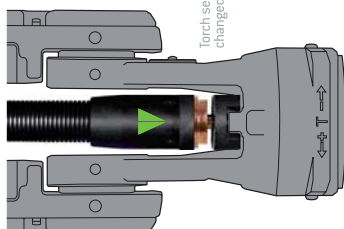
with 100% duty cycle

DINSE system components are built for maximum duty cycle. For your operations: You can rely on steady work at full output.



Torch set

Torch set can be changed quickly



DIX RET 310 -x

for the best efficiency

Another unique DINSE feature: The completely insulated wire feeding guarantees safe welding current transfer to the contact tip.



Torch set

DIX RET 310 -x

and is proven and compatible

Changing from gas cooling to liquid cooling only requires the connecting of the coolant hoses.

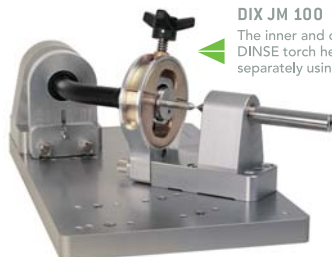


DINSE checking jig with aligning module

Precise adjustment of the DINSE torch heads

DIX PV 1XX

Precise checking jig for position control of the TCP. Testing the torch head for parallelism as well as center of contact tip.



DIX JM 100

The inner and outer part of the DINSE torch heads can be re-aligned separately using the aligning module.

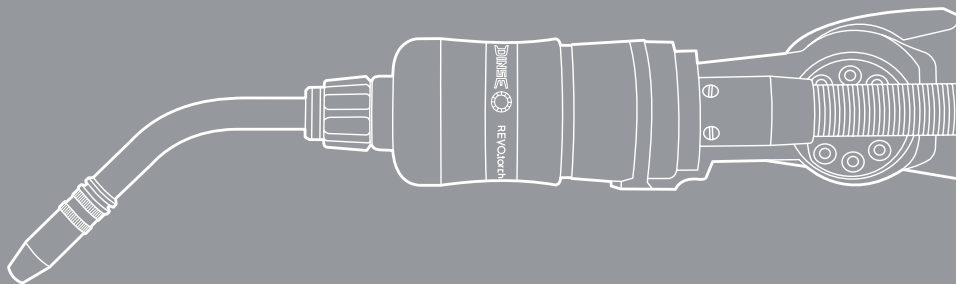


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MIG/MAG



REVO torch



REVO torch 10/2008
Subject to change



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WELDING

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WELDING

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