



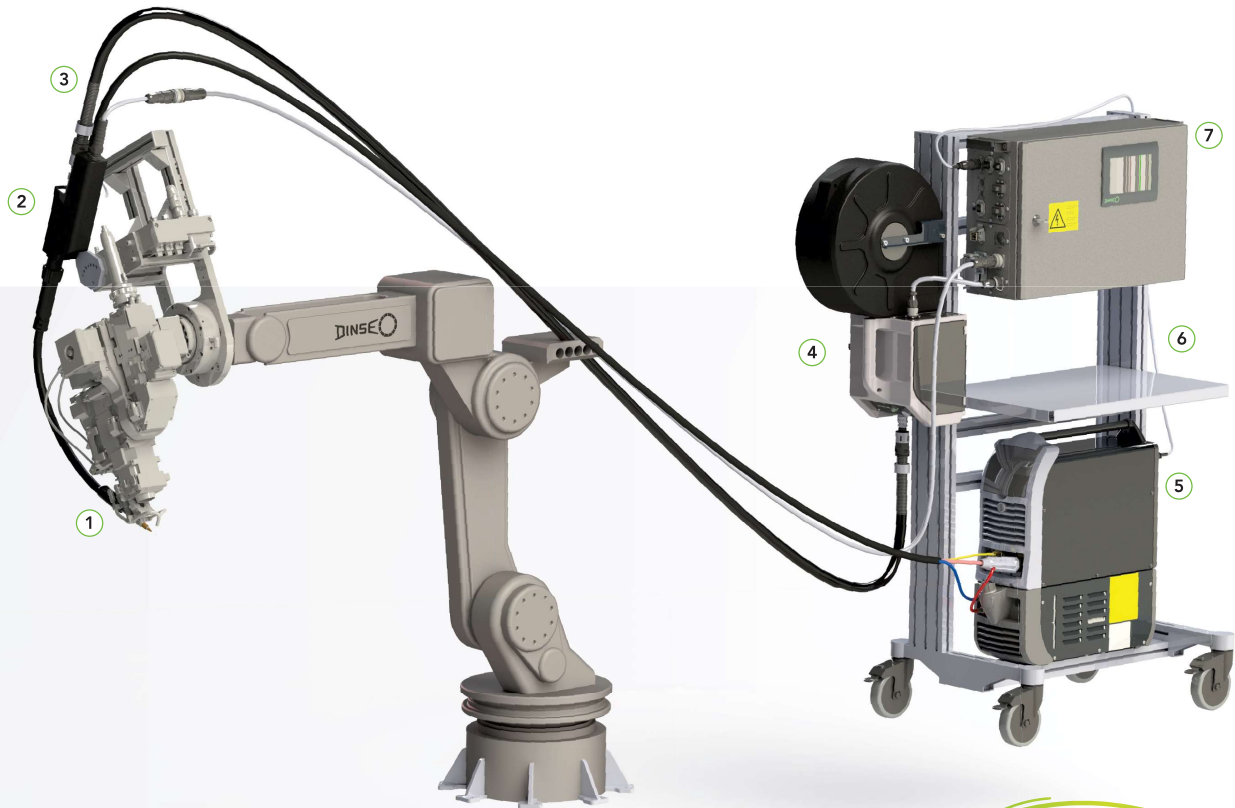
DINSEO



WIRE FEEDING SYSTEMS FOR WELDING APPLICATIONS

THE PRECISE
DRIVE PACKAGE
FOR DEMANDING
MANUFACTURING
PROCESSES

- ▶ Exact wire feeding
- ▶ Extremely short reaction times
- ▶ Modern drive concept
- ▶ Fully digitalized process control
- ▶ Detailed monitoring
- ▶ Maximum production reliability
- ▶ Robust
- ▶ Already very successfully in use in the automotive industry



- ① DIX LHZ 100 Torch Set
- ② DIX FD10xLS Front drive unit with water set
- ③ DIX VLSL 201 xx Supraliner
- ④ DIX WD 300 FD Wire feeder
- ⑤ DIX HW 300 PULS Hot wire power source and cooling module DIX CM 592 HW
- ⑥ DIX TR 150/300 Trolley
- ⑦ DIX FDE 150 Control unit



QUALITY AND PERFORMANCE - WITHOUT COMPROMISE

THE TOP CLASS SYSTEM FOR SOPHISTICATED PROCESSES

Complicated component geometries, weld seams in the visible area and special stability requirements demand the highest welding quality. This is where DINSE systems prove their worth.

Whether cold or hot wire: The use of filler wire provides decisive technological advantages in laser welding and soldering.

All system components of our modular wire feeding system are optimized for laser welding and soldering, perfectly matched to each other and have standardized interfaces as well as various connection options.

Torch head, torch set, drive unit, wire feeder, connection set, control unit, power source and cooling module are at the cutting edge of industrial technology, ensuring smooth production processes, perfect communication, fast signal conversion and detailed monitoring of the entire process.

FASTER THAN THE REST PRECISE AS NEVER BEFORE!



4-5 TIMES FASTER RESPONSE TIME

- ✓ Increased productivity
- ✓ By far the fastest Industrial Ethernet technology



HIGH REPRODUCIBILITY OF SIGNAL RUNNING TIMES

- ✓ Reduction of rework



V-PROP CAPABLE

The wire conveyor speed follows the robot speed in real time

- ✓ Avoidance of welding defects and production scrap



MULTI-CORE PROCESSOR

Powerful industrial PC instead of a conventional PLC control

- ✓ Fast signal processing



INTERFACE FOR ALL FIELDBUS SYSTEMS (optional analog control)

- ✓ Guaranteed compatible with your robot



LATEST OPERATING SYSTEM (WINDOWS 10 IOT)

- ✓ Innovative and latest technology



REMOTE MAINTENANCE

Remote access and maintenance possible from anywhere in the world

- ✓ Fast response times and avoidance of production downtime
- ✓ Access to the control possible at any time, without presence on site



MODULAR CONSTRUCTION

Standard components expandable

- ✓ Future-proof and always up-to-date
- ✓ Savings potential - despite the latest technology



INTEGRATED DINSE USV TECHNOLOGY

always keeps and backs up your parameters/data via HDD backup

- ✓ No data loss, even in the event of a hard shutdown or power failure
- ✓ Process reliability



MONITORING

- ✓ Management, diagnostics, error evaluation and quality assurance in one tool



HOT WIRE CAPABLE

- ✓ Compatible with your hot wire process

FRONT DRIVE UNIT DIX FD 10x LS(-WB)

MAXIMUM PRECISION: FRONT DRIVE, WIRE FEED SENSOR AND WIRE BRAKE ARE COMBINED IN ONE DYNAMIC UNIT.

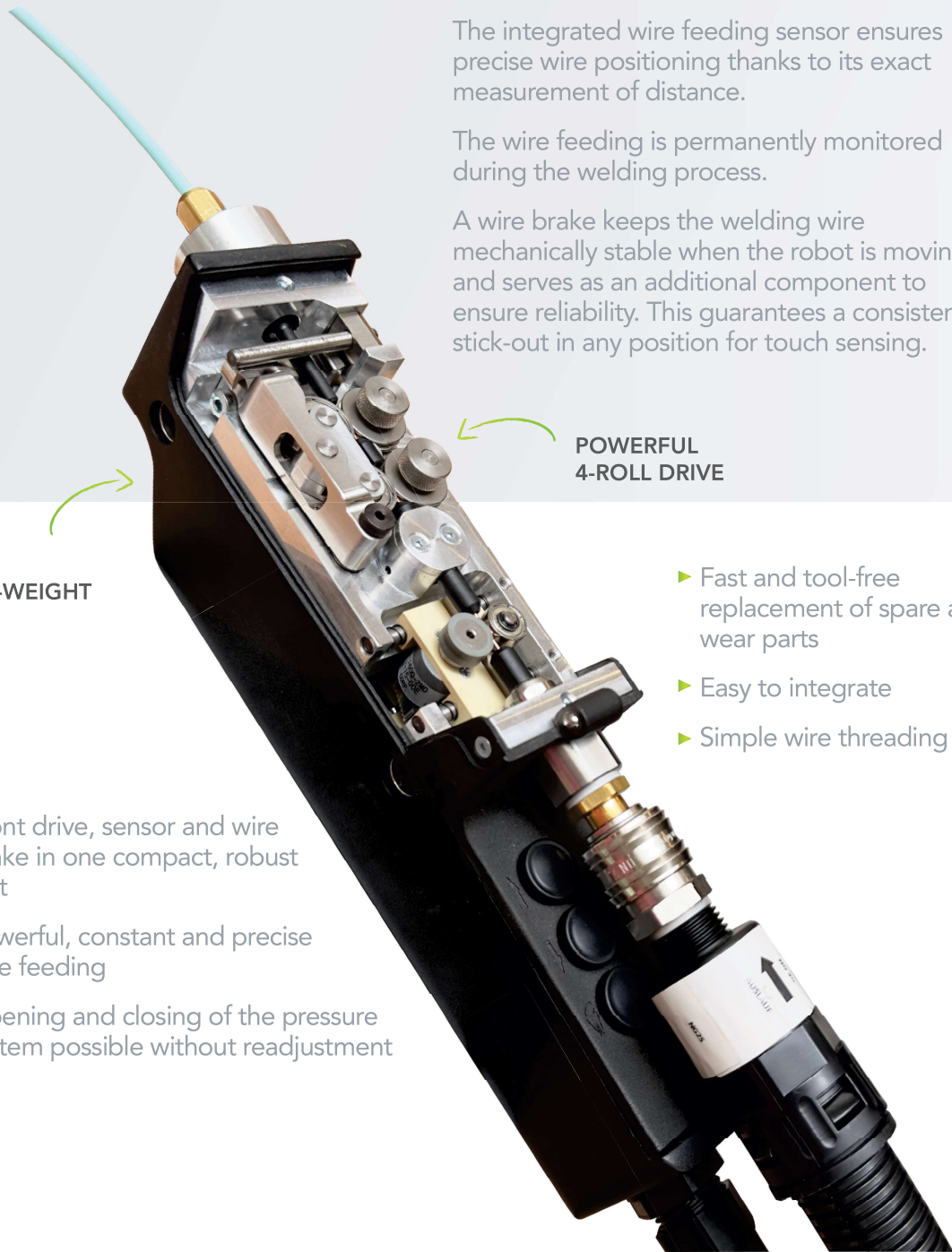
An innovative four-roll drive ensures even more powerful wire feeding.

The compact dimensions ensure a wide range of applications thanks to good component accessibility.

The integrated wire feeding sensor ensures precise wire positioning thanks to its exact measurement of distance.

The wire feeding is permanently monitored during the welding process.

A wire brake keeps the welding wire mechanically stable when the robot is moving and serves as an additional component to ensure reliability. This guarantees a consistent stick-out in any position for touch sensing.



POWERFUL
4-ROLL DRIVE

LOW-WEIGHT
1,8 kg

- ▶ Fast and tool-free replacement of spare and wear parts
- ▶ Easy to integrate
- ▶ Simple wire threading
- ▶ Front drive, sensor and wire brake in one compact, robust unit
- ▶ Powerful, constant and precise wire feeding
- ▶ Opening and closing of the pressure system possible without readjustment

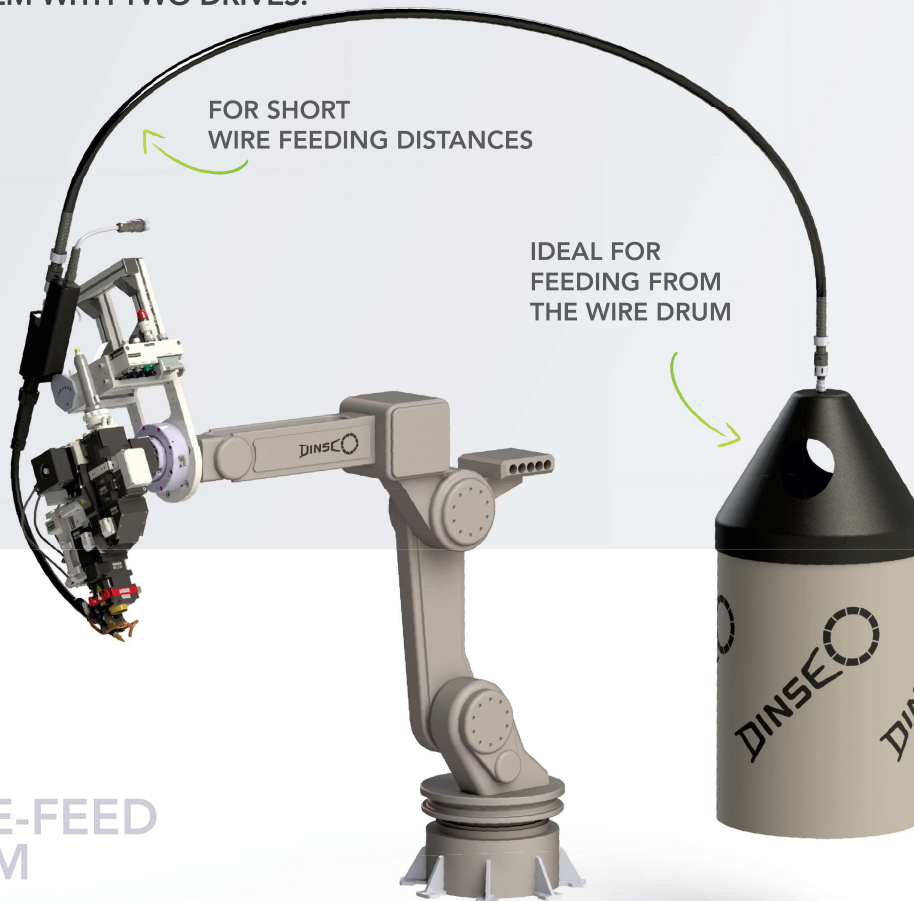
WIRE FEEDING CONCEPTS

**DIFFERENT VARIANTS - ONE CLAIM:
PRECISE WIRE FEEDING.**

**THE OPTIMUM SOLUTION IS OFFERED BY
THE DINSE SINGLE-FEED WIRE FEEDING
CONCEPT WITH ONE DRIVE OR THE PUSH-
PUSH SYSTEM WITH TWO DRIVES.**

THE PERFECT INTERACTION

DINSE wire feeding systems are flexible adaptable to spool holders, large spools and wire drums in various sizes. The DINSE wire feed system is cold and hot wire capable.



SINGLE-FEED SYSTEM

In the DINSE SINGLE-FEED system, the wire is fed directly from the barrel to the workpiece by the powerful 4-roll drive of the FD 10x LS drive unit.

This system design is suitable for wire feeding of CuSi, steel and stainless steel wires (\varnothing 0,4 – 1,6 mm). Thanks to the few components required

in the process, this wire feeding concept is cost-effective and easy to maintain - with highly precise wire feeding.

WIRE FEEDING
UP TO 55 METERS

WIRE FEEDER
DIX WD 300 FD
Supporting PUSH-operation
for wire feeding over long
distances

PUSH-PUSH TECHNOLOGY

THE ADJUSTABLE TORQUE OF THE FORCE-CONTROLLED ADDITIONAL MOTOR (SLAVE) MAKES IT POSSIBLE TO PRECISELY CONTROL THE REQUIRED FEED FORCE. THIS PROVIDES THE FLEXIBILITY TO ADAPT TO DIFFERENT MATERIALS, WIRE THICKNESSES OR WORKING CONDITIONS

THE FRONT, SPEED-CONTROLLED MOTOR IN THE DIX FD 10X LS(-WB) DELIVERS EXACTLY THE REQUIRED AMOUNT OF WIRE (MASTER)



The DINSE PUSH-PUSH system operates with two completely decoupled drive units, thus ensuring wire feeding to the front drive as required. Synchronization of the two drive units is not required.

This wire feeding concept is particularly suitable for soft wires, such as aluminum.

WIRE BUFFER TECHNOLOGY INCLUDED

Guarantees a gentle wire feed with less effort on the front drive.

With the DINSE wire buffer technology, there are no delays in the feeding process.

WIRE CAN BE FED EITHER FROM THE WIRE DRUM OR FROM THE SPOOL



PLASTIC CASE
Lightweight, robust and fully insulated

CONSTANT WIRE FEEDING INDEPENDENT OF TWISTING, BENDING AND LENGTH OF WIRE BUFFER



PROVEN IN PRODUCTION

Whether you need a highly rigid chassis, flawless seams in visible areas, or weld seams with exceptional load capacity, look no further than the DINSE wire feeding system designed specifically for laser applications. Our system not only meets but exceeds the highest demands in automated production.

- ▶ Cold and hot wire applications
- ▶ Welding and brazing
- ▶ Electron beam processes (TIG and laser applications with filler wire)
- ▶ Coating with the aid of various laser optics
- ▶ Rapid prototyping processes
- ▶ Production of new alloys

FLEXIBILITY FOR THE HIGHEST DEMANDS

- ▶ Processing of unalloyed and low-alloyed steels
- ▶ Welding of high alloy steels, nickel-based and aluminum alloys
- ▶ Soldering of surface coated materials
- ▶ Brazing of mixed joints between different materials
- ▶ Soldering and cladding of wear resistant coatings



DINSE is your dependable partner for the entire welding process. Contact us and schedule an appointment for consultation today. Together with you we will find the best solution for your application.



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