

**REIME**

**NORIS**



PI0705

Product Information

## NORIS-INNENSPAN

The reliable alternative for large threads



Ernst Reime –  
The tradition continues.

## NORIS-INNENSPAN machine taps

### Large threads require extraordinary tools!

The outstanding advantages of the **NORIS-INNENSPAN** compared to a conventional machine tap ensure that you get maximum productivity, universality and safety for both blind and through hole threads.

### Technical features for better threads

The recess on the front of the tool allows tapped thread depths of up to  $2 \times D$  in blind holes without having to empty chips.

More cutting teeth than conventional tools ensure perfect chip distribution.

Maximum self-control is achieved by the non-grooved guide section.



These features ensure superb results in terms of process reliability, trueness to gauge and surface quality whilst also satisfying the high demands required for the production of turbines and maritime engines, for example.

The **NORIS-INNENSPAN** machine tap is available from stock in a solid version (see page 3) and a mounted version (see page 4) depending on the thread size.

Large thread dimensions should only be produced using a tool mounting with a safety coupling and a length compensation unit.

The **NORIS quick-change thread tapping chuck** type ISP (see page 7) is ideal for this purpose.

### Reduce costs by regrinding

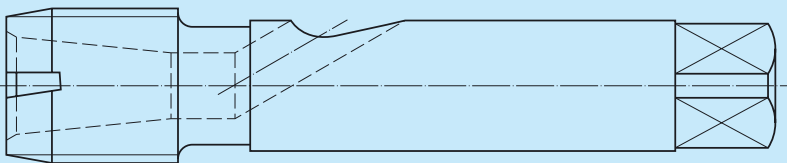
Prompt regrinding of the tool ensures maximum tool profitability and the protection of existing resources. We offer an on-site regrind service for this purpose.

**NORIS-INNENSPAN** – the robust colleague for large thread dimensions.

## The current range

The standard dimensions are set out on the appropriate pages of the thread technology catalogue

**NORIS-INNENSPAN machine tap**  
 Order No. 7682  
 (Solid version)



| Thread type                          | Abbreviation | Dimensions                   |
|--------------------------------------|--------------|------------------------------|
| Metric ISO standard thread<br>DIN 13 | M            | M20 to M64                   |
| Metric ISO fine thread<br>DIN 13     | MF           | M27x2 to M72x6               |
| Pipe thread<br>DIN EN ISO 228        | G            | G 1/2 to G 1                 |
| Unified thread<br>ASME-B1.1          | UN           | UN 1 1/8 - 8<br>to UN 2 - 8  |
| Unified coarse thread<br>ASME-B1.1   | UNC          | UNC 3/4 - 10<br>to UNC 1 - 8 |

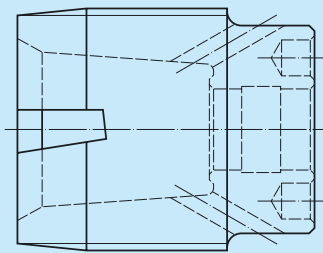
**Please note:** We also produce special dimensions to order – just tell us what you want.



## The current range

The standard dimensions are set out on the appropriate pages of the thread technology catalogue

**NORIS-INNENSPAN machine tap**  
Order No. 7692  
(Mounted version)

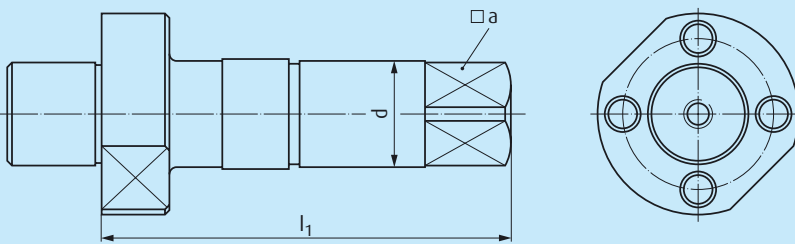


| Thread type                          | Abbreviation | Dimensions                      |
|--------------------------------------|--------------|---------------------------------|
| Metric ISO standard thread<br>DIN 13 | M            | M56 to M64                      |
| Metric ISO fine thread<br>DIN 13     | MF           | M52x3 to M120x6                 |
| Pipe thread<br>DIN EN ISO 228        | G            | G 1 1/2 to G 2                  |
| Unified thread<br>ASME-B1.1          | UN           | UN 2 1/4 - 8<br>to UN 2 1/2 - 8 |

**Please note:** We also produce special dimensions to order – just tell us what you want.

# The current range

**NORIS-INNENSPAN mounted shafts**  
Order No. 9940



| Thread tap diameter | Shaft size | $l_1$<br>mm | $d$<br>mm | $a$<br>mm |
|---------------------|------------|-------------|-----------|-----------|
| > 45 - 54 mm        | I L        | 169         | 25        | 20        |
| > 54 - 63 mm        | II L       | 183         | 28        | 22        |
| > 63 - 74 mm        | III L      | 225         | 32        | 24        |
| > 74 - 84 mm        | IV L       | 247         | 40        | 32        |
| > 84 - 99 mm        | V L        | 279         | 45        | 35        |
| > 99 - 120 mm       | VI L       | 317         | 50        | 39        |
| > 120 - 165 mm      | VII L      | 355         | 56        | 44        |
| > 165 - 250 mm      | VIII L     | 345         | 63        | 49        |

**Please note:** We also produce special dimensions to order – just tell us what you want.



## Practical machining example



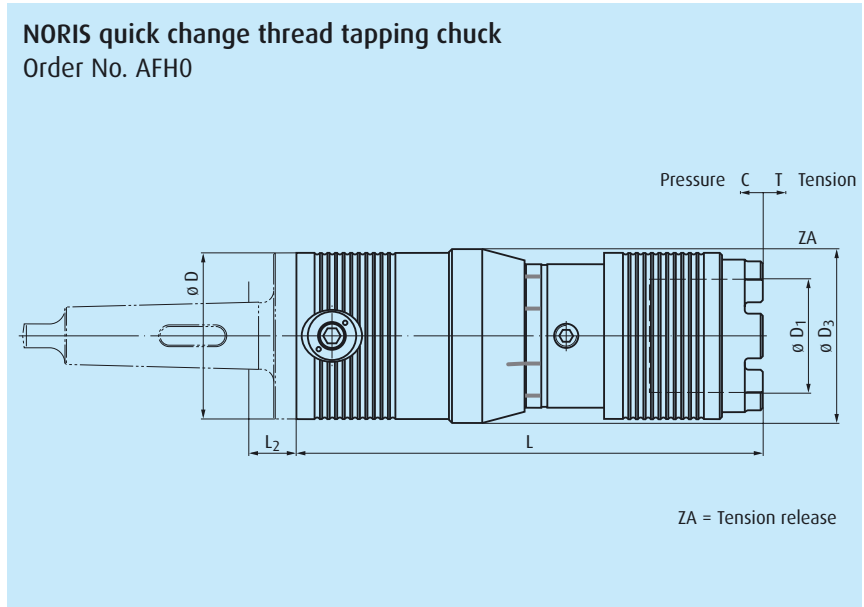
**NORIS-INNENSPAN**  
**M64 - ISO 2**  
**Order No. 7682AAQAA**

|                  |   |
|------------------|---|
| Machine:         | jib drill   |
| Mounting:        | NORIS quick change thread tapping chuck type ISP 30 |
| Material:        | C 45 – approx. 700 N/mm <sup>2</sup>                |
| Dimension:       | M64 - ISO 2   |
| Hole type:       | Blind hole  |
| Core hole depth: | 146 mm  |
| Thread depth:    | 129 mm – fully cut                                  |
| Cutting speed:   | approx. 6 m/min                                     |
| Lubricant:       | NORIS thread tapping paste HT                       |
| Machining time:  | 3.90 min  |

**Applications**

The NORIS quick change thread tapping chucks type ISP are primarily used on large drills and drill units.

**NORIS  
quick change  
thread tapping  
chucks ISP**



**Description**

Series ISP was specially developed for tapping large threads.

The integral length compensation unit works in the pressure and tension directions.

The safety coupling type ISP 30 is designed for a maximum torque of 3000 Nm.

Can be used both for right-hand and left-hand threads.

Series ISP can also be supplied with internal cutting fluid supply to order.

**Special feature**

By blocking the length compensation unit with a locking screw it is also possible to carry out drilling and countersink operations without changing the tool mounting. This eliminates the need for cost-intensive retooling of the mounting.





**How do I machine large threads?**

**With the NORIS-INNENSPAN  
from the thread specialist REIME of course**

**REIME**

**NORIS**

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**Please call us if you require technical support for using this tool.**

**This brochure contains information about NORIS products from REIME.**