

# 1.2. IMPACT DOWEL, SCREW-IN SET

and accessories















# ANCHORING TECHNOLOGY





# Your benefits at a glance:

- Can be utilised in all cases for fixing anchor tie bars retrospectively
- Infinitely variable screw-in depth and clamping thickness
- For fixing formwork in in-situ concrete construction work
- Screw-in set as accessory for fastening purposes when assembling precast components as well as for fixing formwork and / or formwork supports for in-situ concrete
- Approved load ratings determined for a 15 N/mm² low concrete strength
- Breaking forces tested and documented by an official testing institute
- Inexpensive solution in all cases where a larger concrete anchor is not necessary

### Impact dowel D&W 15 mm

This special impact dowel with a Dywidag-internal thread is used by foremen over and over again with enthusiasm.

For subsequent anchoring on sites with low loads there is nothing better available, because the according tie bars with a practical coarse thread are used on every site. With the tie bars in suitable length any clamping widths for all kinds of use can be realized.



### **Bearing load table**

recommended admissible load for short time anchoring during construction

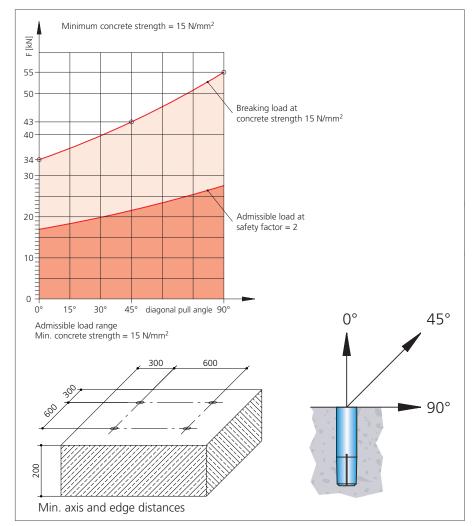
	Concrete strength			
	15 N/mm²	25 N/mm²	35 N/mm²	
Load direction				
Axial tension 0°	17.0	21.9	26.0	
Diagonal pull 45°	21.5	27.8	32.8	
Shearing 90°	27.5	35.5	42.0	

For safety reasons we state the admissible loads for a low concrete strength of 15 N/mm<sup>2</sup>.

That means in practice that the anchors are often installed the next day after concreting and are already loaded.

This data are based on extensive tests of the offical laboratory "bautest" in Augsburg

Additionally the admissible loads for concrete strength 25 and 35 N/mm² are stated for using the dowels in hardened concrete.



This load is meant as characteristic values



2



**ACCESSORIES** 



# Accessory: hard metal drill

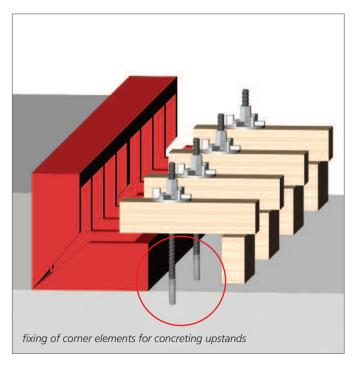
The **hard metal drill** with SDS-detection and crosstype cutting guarantees a constant boring diameter of  $\emptyset$  22 mm, also with deep borings.

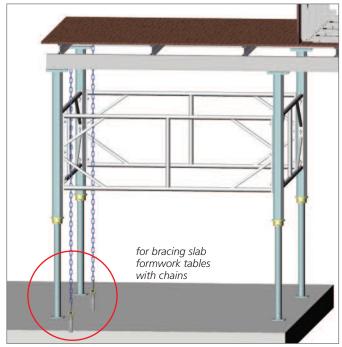
# Accessory: punching pin

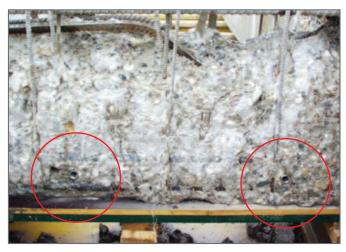
The installed dowel will be spread with the **punching pin** made of tempered steel..



### **Examples for use:**









formwork for renovation of a girder







### **SCREW-IN SET**

### Screw-in set

Wide range applicable bolt with nut, which allows independence in multiple ways:

**User defined clamping thickness**, regardless of clamping a steel plate with 5 mm or 5 cm thickness.

**User defined screwing depth**, regardless of screwing the bolt into the dowel 35 mm or into the threaded sleeve 100 mm.

**User defined hole diameter** between 17 and 30 mm, the tightening of the conical shaped nut guarantees automatic centering without any tolerance in the middle of the hole. A shifting is not possible.

**Tightening without any special tool** (fork wrench), hammer will be enough!

No additional costs for adapter sleeves or washers.



### **Easy mounting of screw-in set:**



1. Place clamping part over the anchoring point.



2. Screw bolt into the anchoring ground.



 Tighten hexagonal nut by hand, in this way the nut will center the clamping part without tolerances.



4. Final tightening of the screw by simply turning it with second screw-in set. Because of the form of a screw spanner of the screw-in set also a conical flange nut can be tightened.





**ACCESSORIES** 



# **Accessory: Dowel railing post**

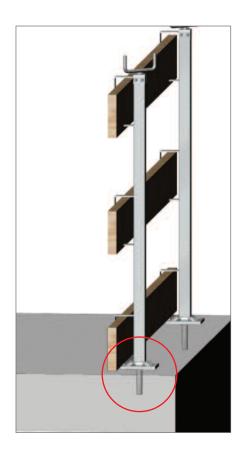
Especially for renovation work the edge protection of a construction site with the ROBUSTA dowel railing post is a convenient solution.

It is very stable because of the large base plate. A safe use also at high buildings up to 200 m above ground is guaranteed.

The thread core has an hard-wearing coarse thread D&W 15.

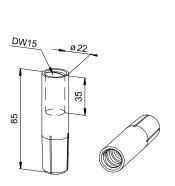
By turning the handle easy and comfortable screwing into the dowel is guaranteed.





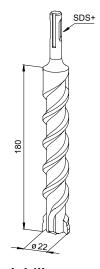


### **TECHNICAL DATA:**



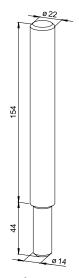
Impact dowel D&W 15, galvanized

Weight [kg/100 units]	Item No.
16.5	121515



Hard metal drill

Weight [kg/100 units]	Item No.
40.0	121517



Punching pin, galvanized

Weight [kg/100 units]	Item No.
45.0	121516

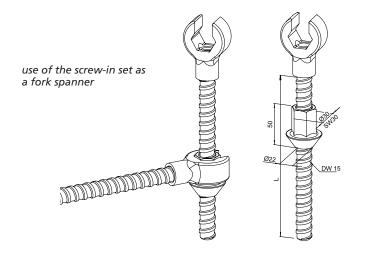






# **GENERAL INFORMATION**

### TECHNICAL DATA:

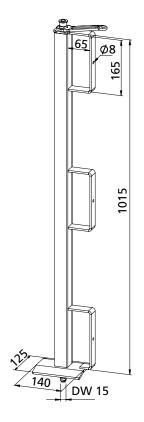


### Screw-in set D&W 15 mm,

### galvanized

Length* [mm]	Weight [kg/unit]	Item No.
180	0.46	111820
300	0.78	111825

<sup>\*</sup>other lengths available upon request



### **Dowel railing post**

galvanized

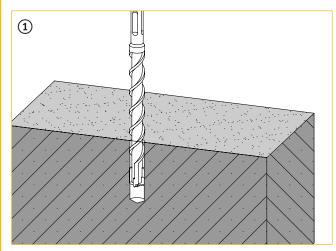
Weight [kg/unit]	Item No.
8.5	330915

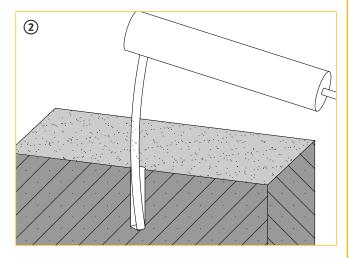


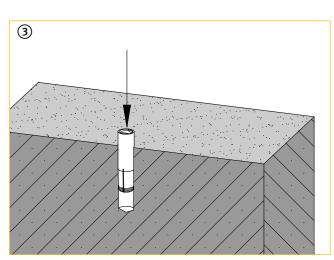


# **SETTING OF IMPACT DOWEL**

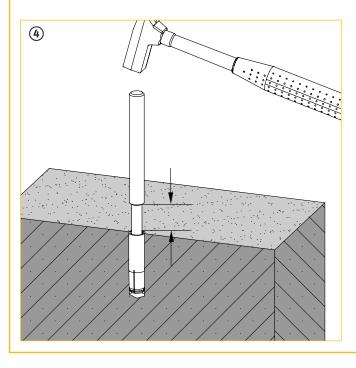
### **Setting of impact dowel:**

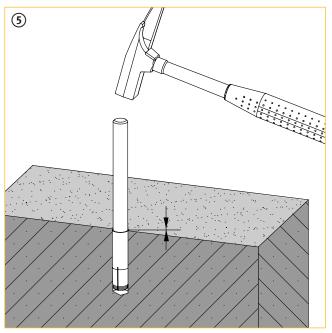






- (1) drilling a hole with diameter 22 mm, depth 95 mm incl. drill
- 2 blow out hole and remove boring dust
- (3) insert dowel flush to the concrete edge
- spread the dowel by strokes on to the punching pin inside the drilling hole
- (5) strike the punching pin completely to the bottom, subsequent screw in the anchor bar







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