



Operating instruction
Boring tools for rough machining
Ø 24,5–205mm





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### 1. Basic safety information

Before first use, please read the operating instructions carefully. These provide important safety information and information concerning

use and maintenance of the tool.

This twin cutter tools are designed for cutting in metallic materials. Specific information on the machining of individual metallic materials is not the subject of these operating instructions. No other application is permitted and could be dangerous. The manufacturer cannot be held responsible for damage or injury caused by improper use.

A damaged tool could endanger your safety! Decommission the tool immediately and contact your suppliers.

This tool complies with the prescribed safety regulations. Repairs must be undertaken only by trained personnel. Improper repairs can represent a considerable risk for the user. Warranty provisions can be implemented only in the event that original Erickson spare and accessory parts are used.

Keep the operating instructions for use in a safe place for future use.

### 2. Application

These operating instruction is valid for:

Twin cutter tools Ø 19,5 – 29,5 mm



Twin cutter tools Ø 29 – 205 mm



The **twin cutter tools** are intended for rough machining of bores from  $\emptyset$  19.5 – 205 mm. They are available with 90° approach angle.

### 3. Operation

Both the general and the specific operating notes must be observed for the respective application.

#### General operating notes:

The tools have adjustable diameters. An adjusting device or gauge is needed to set the (individually adjustable) cutters. The tools feature a KM..TS support or a parallel shank on the machine side. Use only original Erickson supports to hold the tools. All parts must be cleaned prior to installation and then installed in a dry and grease-free state.

When fastening the insert holders with cap screws and clamping bolt, ensure that the clamping bolt is installed so that the flat part points in the direction of the screw head. The thread of some clamping bolts is off-center. In this case, the clamping bolt must be mounted so that the complete adjustment range (boring range) is attained and the clamping bolt does not project at the serrated tool body in any position. To adjust the machining diameter, screw in the cap screw slightly and adjust the insert holder to the desired dimension with the threaded pin. Tighten the cap screw after making the adjustment.

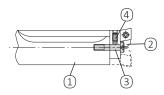
See "Accessories and spare parts" for the tightening torques. Only original Erickson clamping elements are permissible for fastening all components of this boring tool.



#### Operating notes:

### 3.1 Twin cutter tools Ø 19.5 – 29.5 mm

The two insert holders ② are fastened on the serrated tool body ① with serrated front face using cap screws ③. The threaded pin ④ installed in the insert holder is used for diameter adjustment of the cutter. The twin cutter tools can also be used as single cutters.

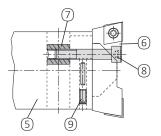


### 3.2 Twin cutter tools Ø 29 – 205 mm

The two insert holders (a) are fastened on the serrated tool body (b) with serrated front face using cap screws (a) and clamping bolt (b) (from Ø 100 mm with two screws per insert holder). The threaded pins (a) installed in the serrated tool body are used for diameter adjustment of the insert holders.

A scale is present as an adjusting aid on the insert holders from Ø 53 mm.

The twin cutter tools can also be used as



single cutters.

#### 4. Maintenance

No maintenance!

To ensure the tool has a long service life, it must be cleaned after use. A light film of oil should be applied to the visible, uncoated steel parts from time to time.



### 5. Accessories

Service keys are included in the delivery.

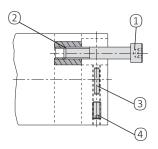
Service keys	Se	rvice	keys
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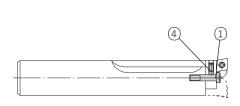
Service keys		Type DIN911
Service keys / Type	Order No.	
s1,5 / DIN911	1138273	
s2,5 / DIN911	1138297	
s4,0 / DIN911	1138315	
s5,0 / DIN911	1138323	Type FT
s6,0 / DIN911	1138331	
Service keys, Torx / Type	Order No.	
T 8 / FT	1021593	- Type KT
T 15 / FT	1021605	
T 20 / FT	1021607	-
T 25 / KT	1022725	- 507



## 6. Spare parts

### 6.1 Serrated tool bodies

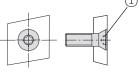




Serrated	Cap screw	1 1		Clamping	Adjustment	Thread pir	<b>1</b> 4
tool body Order No.	Order No.	Key	Torque Nm	bolt (2) Order No.	pin $3$ Order No.	Order No.	Key
6655245	6738812	s4 / DIN911	( 8 Nm)	6738816	_	1136564	s2,5 / DIN911
6655247	6738823	s5 / DIN911	(10 Nm)	6738783	_	3905782	s2,5 / DIN911
6655249	6738813	s5 / DIN911	(10 Nm)	6738783	-	3905782	s2,5 / DIN911
6655271	6738813	s5 / DIN911	(10 Nm)	6738817	_	3905945	s2,5 / DIN911
6655273	6738814	s6 / DIN911	(15 Nm)	6738818	_	6738822	s2,5 / DIN911
6655275	6738815	s6 / DIN911	(15 Nm)	6738819	-	6738822	s2,5 / DIN911
6655277	6738800	s6 / DIN911	(15 Nm)	6738820	_	6763461	s2,5 / DIN911
6655280	6738800	s6 / DIN911	(15 Nm)	6738820	6738821	6738795	s2,5 / DIN911
6655239	6738790	T 25 / KT (1	0 Nm)	_	-	-	s1,5 / DIN911
6655241	6738791	T 25 / KT (1	0 Nm)	_	_	-	s1,5 / DIN911
6655243	6738792	T 25 / KT (1	0 Nm)	_	_	6655244	s1,5 / DIN911

### 6.2 Fastening screws for the most common indexable inserts

Insert form	Countersunk scre Order No.	ew ① Service key, torx	torque Nm
CC06	6738799	T8/FT	1.2
CC09	6738796*	T 15 / FT	3.0
CC09	6738798	T 15 / FT	3.0
CC12	6738824	T 20 / FT	5.0



<sup>\*</sup>Only for insert holder 6655246.



### 7. Technical data

### Max. permissible speeds:

- The speeds stated are designed for a symmetrical tool design. Asymmetrical designs reduce values by 50%.
   The specified speed is correspondingly reduced for the single-edged tools.
- Short overhangs reduce concentricity errors as well as imbalance. This increases the life of the spindle and improves safety.
- Suitable protective devices or machine enclosures must be provided against flying particles and cutter breakage.
- The mounting and fixing screws required must be checked for correct tightness before work is started.
- Ensure that the tool is balanced to the manufacturer's requirements.



In principle, max. permissible speeds involve a risk due to the centrifugal energies involved.

It is therefore essential to take the safety aspects into account.

# Twin cutter tools Ø 19.5 – 205 mm

	Max. permis-
Boring range	sible speed
mm	in rpm
19.5-23.0	13,500
22.5-26.0	12,000
25.5-30.5	10,500
29.0-37.0	8,500
36.0-44.0	7,000
43.0-54.0	5,800
53.0-66.0	4,750
65.0-83.0	3,750
82.0-103.0	3,000
100.0-155.0	2,000
150.0-205.0	1,900