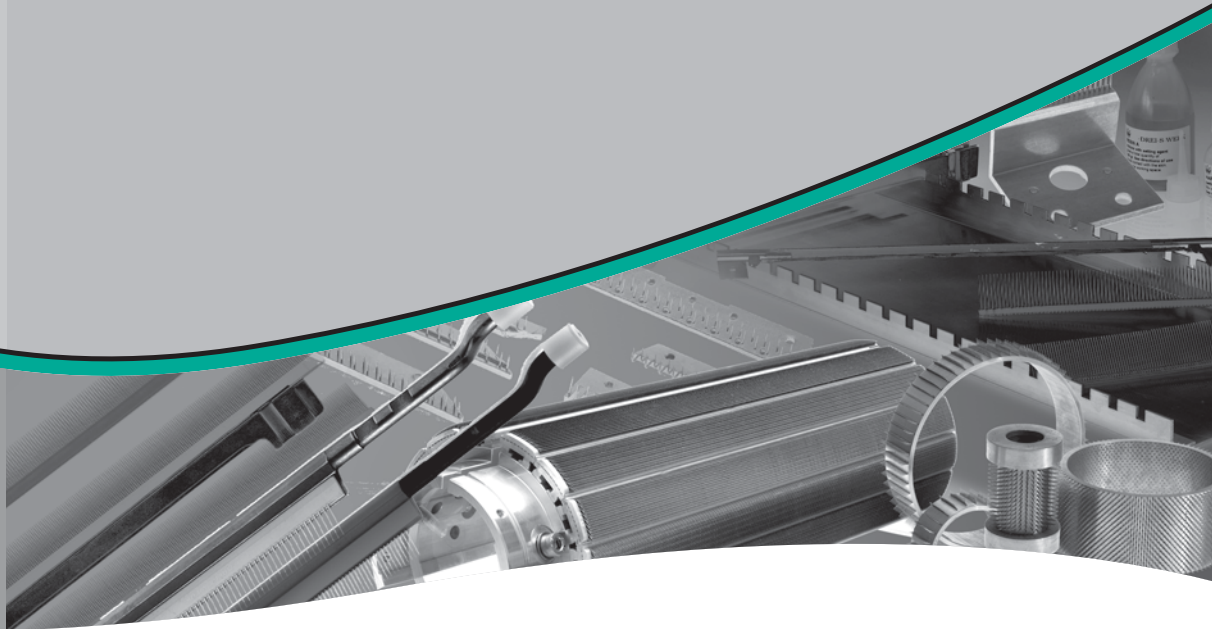


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Superior Standards & Services!*



## PINNING SYSTEMS

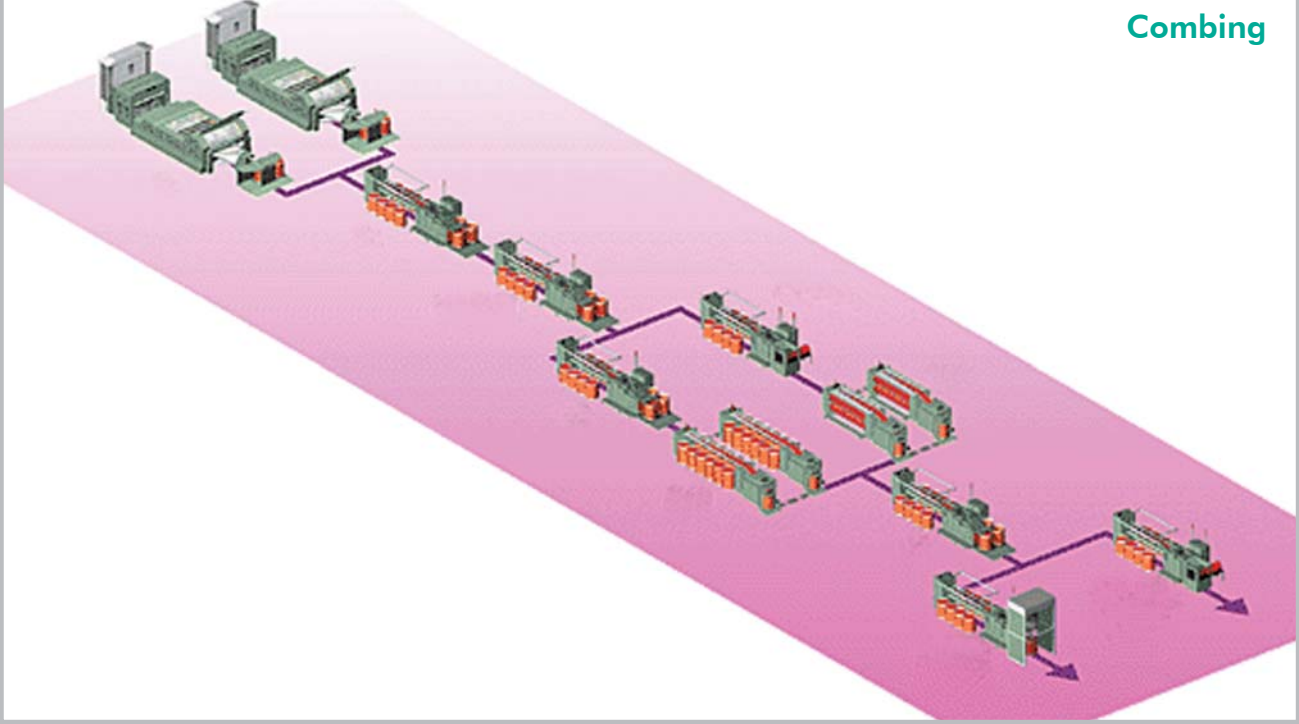


# DREI-S-WERK

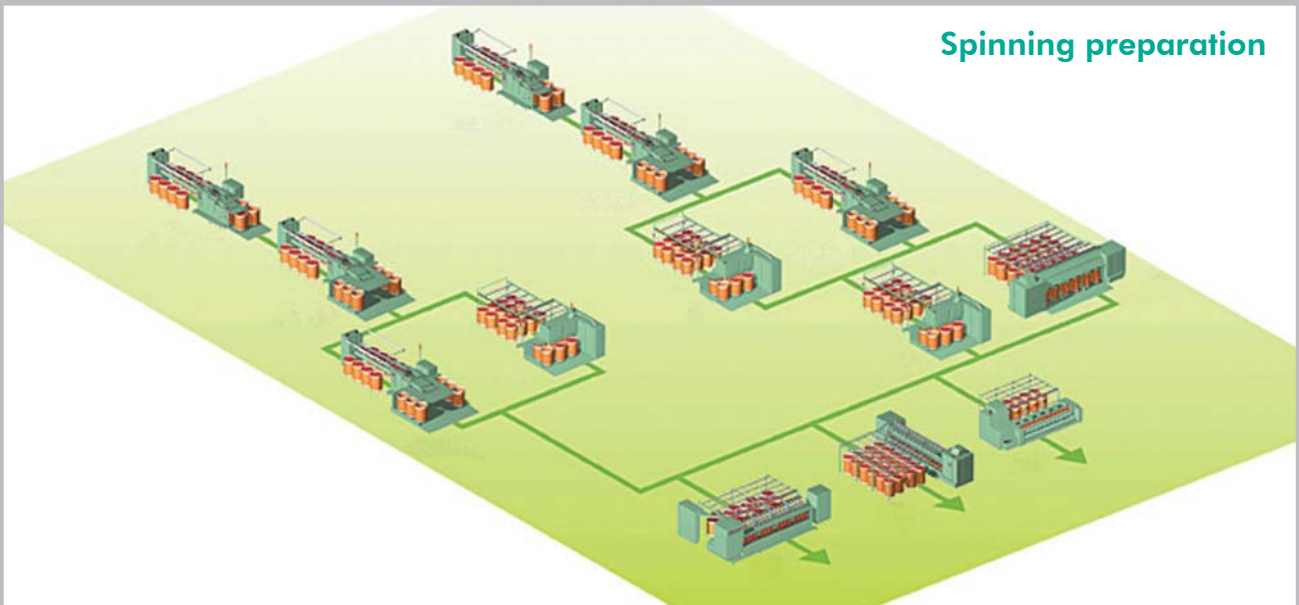
PRECISION MADE STANDARD PARTS  
PINNING SYSTEMS  
DREI-S Technologies

# PRODUCTION PROCESS

Combing



Spinning preparation



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# Contents

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*From fibre to yarn*



**Gill box**

The purpose of the gill box is to mix and align fibre strands with the help of a pin field. This so-called pin field may be transported by means of a screw drive, chain drive or rotary drive.

During operation, the following process parameters must be correctly adjusted: feed weighting, working width, draft and draw speed.

The correct draft has been set when all fibres in the pin field maintain the feed speed until they reach the draw-off roller.

# PINNING SYSTEM FOR CHAIN DRIVEN GILL BOXES

## 2B



### Machine type

NSC GC12/13/14/15/30, SANT ANDREA CSN, ST21, TC3

### Example for ordering

System	2B
Model	S
Machine type	NSC GC13
Pin No.	16x22x1
Pins/cm	6 N/cm
Pin field	270 mm

### Type

Metal plate to be glued or soldered fast

### Model

Standard (S)

### Properties

Excellent grip  
Highly resilient  
All-purpose use  
Robust  
Reliable

### Range of application

The chain driven gill boxes listed above without SENZO-type slot sizes

### Pinning and pin removal

Aids: 2 component adhesive, installation plate (see page 19)

## SENZO



### Machine type

NSC GC12/13/14/15/30, SANT ANDREA CSN, ST21, TC3

### Example for ordering

System	SENZO
Model	S
Machine type	NSC GC15
Pin No.	16x22x1
Pins/cm	6 N/cm
Pin field	270 mm

### Type

Plastic pin-strip for insertion

### Model

Standard (S) slot width: 2.00 – 2.15 mm; slot depth: 4.50 mm  
Low flange (NS) slot width: 2.00 – 2.20 mm; slot depth: 3.50 mm only for 17.5 x 332/382 mm  
Heavy duty (HD) glass-fibre reinforced

### Properties

No adhesive  
No heating  
All-purpose use  
Robust  
Reliable

### Range of application

All the chain driven gill boxes listed above.  
Please note available slot sizes!

### Pinning and pin removal

Aids: insertion device (see page 19)

# PINNING SYSTEM FOR CHAIN DRIVEN GILL BOXES

## OWAS



### Machine type

NSC GC12/13/14/15/30, SANT ANDREA CSN, ST21

### Example for ordering

System	OWAS
Model	S
Machine type	NSC GC30
Pin No.	16x22x1
Pins/cm	6 N/cm
Pin field	270 mm

### Type

Plastic faller bar with steel insert

### Model

Standard (S)

Heavy duty (HD) increased stiffness

### Properties

Simple to use

Light (150 - 180 g)

Low chain wear

Robust

Reliable

### Range of application

All the chain driven gill boxes listed above

### Pinning and pin removal

No additional equipment needed

# PINNING SYSTEM FOR CHAIN DRIVEN GILL BOXES

## NSC GC12/13/14/15/30 + SANT ANDREA CSN

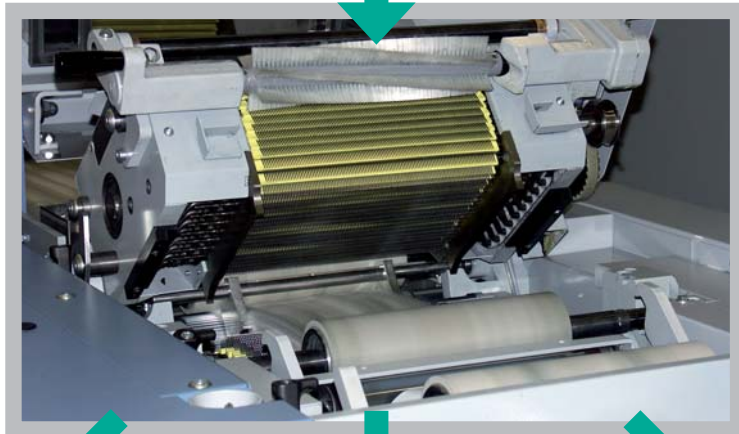
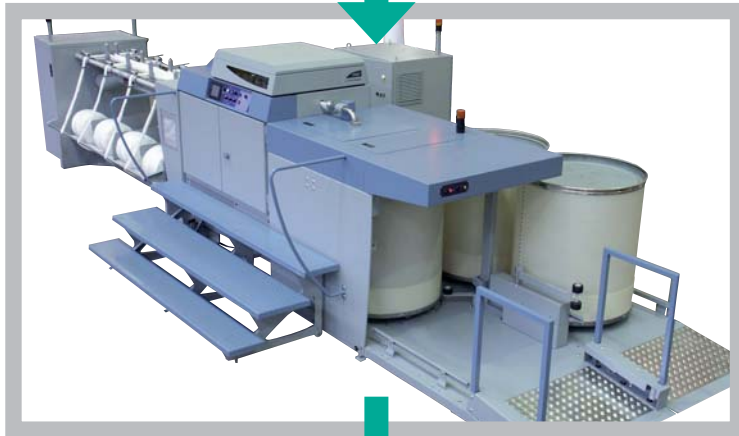
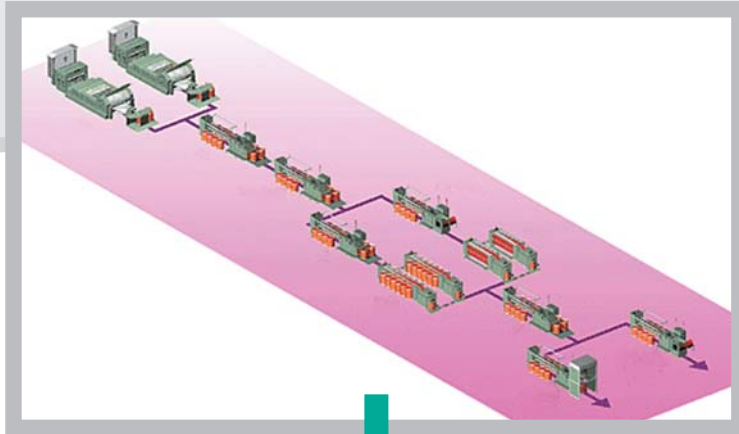
Pin No.	Pin type	Pins/cm	Pin field	Flange height
16x7/8	round	3.00	220 mm	13.5 mm
16x1	round		220 mm	17.5 mm
16x7/8	round		270 mm	13.5 mm
16x1	round		270 mm	17.5 mm
16x7/8	round	4.00	220 mm	13.5 mm
16x1	round		220 mm	17.5 mm
16x7/8	round		270 mm	13.5 mm
16x1	round		270 mm	17.5 mm
15x19x1	flat		220 mm	17.5 mm
15x19x1	flat		270 mm	17.5 mm
17x7/8	round	5.00	220 mm	13.5 mm
17x1	round		220 mm	17.5 mm
17x7/8	round		270 mm	13.5 mm
17x1	round		270 mm	17.5 mm
15x21x1	flat		220 mm	17.5 mm
15x21x1	flat		270 mm	17.5 mm
16x22x1	flat	6.00	220 mm	17.5 mm
16x22x1	flat	270 mm	17.5 mm	
17x23x1	flat	7.00	220 mm	17.5 mm
17x23x1	flat		270 mm	17.5 mm
18x24x1	flat	8.00	220 mm	17.5 mm
18x24x1	flat		270 mm	17.5 mm
20x26x1	flat	9.00	220 mm	17.5 mm
20x26x1	flat		270 mm	17.5 mm

## SANT ANDREA ST21, TC3

Pin No.	Pin type	Pins/cm	Pin field	Flange height
16x13/16	round	3.00	220 mm	12.0 mm
16x13/16	round		270 mm	12.0 mm
16x13/16	round		220 mm	13.0 mm
16x13/16	round	4.00	220 mm	12.0 mm
16x13/16	round		270 mm	12.0 mm
16x13/16	round		220 mm	13.0 mm
16x7/8	round		220 mm	17.5 mm
17x13/16	round	5.00	220 mm	12.0 mm
17x13/16	round		220 mm	13.0 mm
15x21x13/16	flat		220 mm	12.0 mm
15x21x13/16	flat		220 mm	13.0 mm
15x21x7/8	flat		220 mm	17.5 mm
15x21x7/8	flat	6.00	220 mm	17.5 mm
16x22x13/16	flat		220 mm	12.0 mm
16x22x13/16	flat		220 mm	13.0 mm
16x22x13/16	flat	7.00	270 mm	13.0 mm
17x23x13/16	flat		220 mm	13.0 mm
17x23x7/8	flat	220 mm	17.5 mm	

further dimensions available on request

# CHAIN DRIVEN GILL BOXES



**2B**



**SENZO**



**OWAS**



# PINNING SYSTEM FOR SCREW DRIVEN GILL BOXES

## 2K



### Example for ordering

System	2K
Model	S
Machine type	NSC GN6
Pin No.	16x22x1
Pins/cm	6 N/cm
Pin field	220 mm

### Machine type

NSC GN4/5/6/7, SANT ANDREA VSN, SANT ANDREA SEUP, OKK

### Type

Plastic pin-strip to be glued in

### Model

Standard (S)

### Properties

Excellent grip

Highly resilient

All-purpose use

Robust

Reliable

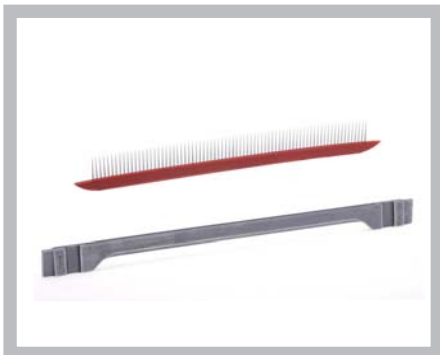
### Range of application

All the screw driven gill boxes listed above irrespective of slot width

### Pinning and pin removal

Aids: 2 component adhesive, installation plate, fixing plate (see page 19)

## MONO



### Example for ordering

System	MONO
Model	S
Machine type	NSC GN6
Pin No.	16x22x1
Pins/cm	6 N/cm
Pin field	220 mm

### Machine type

NSC GN4/5/6/7, SANT ANDREA VSN, SANT ANDREA SEUP, OKK

### Type

Plastic pin-strip coated with hot melt adhesive

### Model

Standard (S)

### Properties

Excellent grip

Highly resilient

All-purpose use

Robust

Reliable

### Range of application

All the screw driven gill boxes listed above irrespective of slot width

### Pinning and pin removal

Aids: standard heating device (see page 19)

# PINNING SYSTEM FOR SCREW DRIVEN GILL BOXES

## SENZO



### Machine type

NSC GN4/5/6/7, SANT ANDREA VSN, SANT ANDREA SEUP, OKK

### Example for ordering

System	SENZO
Model	S
Machine type	NSC GN6
Pin No.	16x22x1
Pins/cm	6 N/cm
Pin field	220 mm

### Type

Plastic pin-strip for insertion

### Model

Standard (S) slot sizes: 2.00 – 2.25 mm; slot depth: 8.50 mm

### Properties

No adhesive

No heating

All-purpose use

Robust

Reliable

### Range of application

All the screw driven gill boxes listed above.  
Please note available slot sizes!

### Pinning and pin removal

Aids: insertion device (see page 19)

# PINNING SYSTEM FOR SCREW DRIVEN GILL BOXES

## NSC GN4/5/6/7, OKK

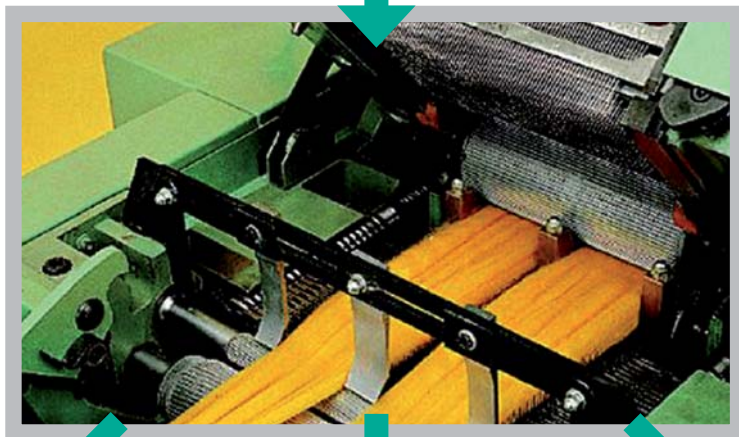
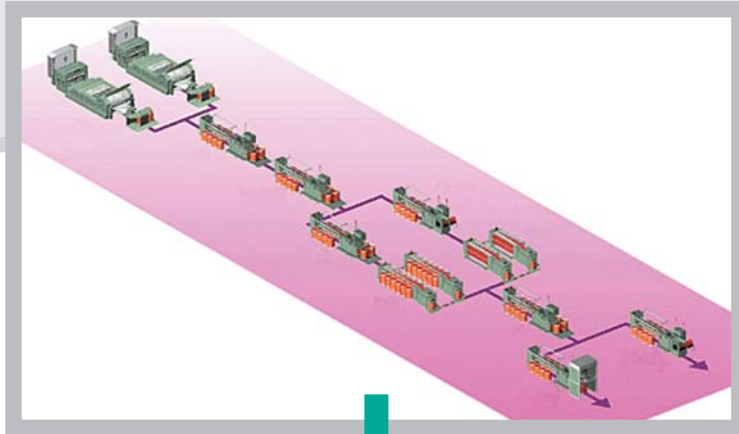
Pin No.	Pin type	Pins/cm	Pin field
16x1	round	3.00	220 mm
16x1	round	4.00	220 mm
15x21x1	flat		220 mm
17x1	round	5.00	220 mm
15x21x1	flat		220 mm
16x22x1	flat	6.00	220 mm
17x23x1	flat	7.00	220 mm
18x24x1	flat	8.00	220 mm
20x26x1	flat	9.00	220 mm

## SANT ANDREA VSN, SEUP

Pin No.	Pin type	Pins/cm	Pin field
16x1.1/16	round	3.00	200 mm
16x1.1/16	round	4.00	200 mm
15x21x1.1/16	flat		200 mm
17x1.1/16	round	5.00	200 mm
15x21x1.1/16	flat		200 mm
16x22x1.1/16	flat	6.00	200 mm
17x23x1.1/16	flat	7.00	200 mm
18x24x1.1/16	flat	8.00	200 mm
20x26x1.1/16	flat	9.00	200 mm

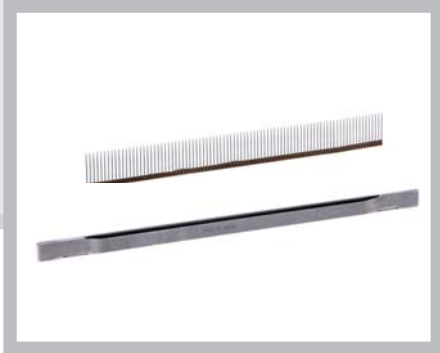
further dimensions available on request

# SCREW DRIVEN GILL BOXES



# PINNING SYSTEM FOR ROTARY HEAD GILL BOXES

## 2K



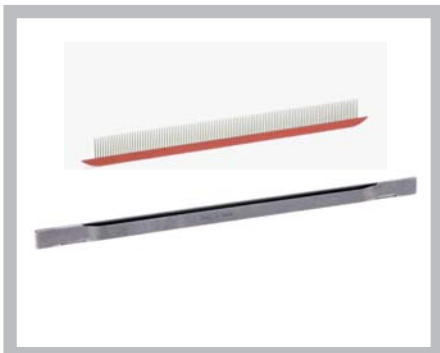
**Machine type**  
COGNETEX SC400/600, SSTR

### Example for ordering

System	2K
Model	S
Machine type	COGNETEX SC400
Pin No.	16x22x15/16
Pins/cm	6 N/cm
Pin field	228 mm

<b>Type</b>	Plastic pin-strip to be glued in
<b>Model</b>	Standard (S)
<b>Properties</b>	Excellent grip Highly resilient All-purpose use Robust Reliable
<b>Range of application</b>	All the rotary head gill boxes listed above irrespective of slot width
<b>Pinning and pin removal</b>	Aids: 2 component adhesive, installation plate, fixing plate (see page 19)

## MONO



**Machine type**  
COGNETEX SC400/600, SSTR

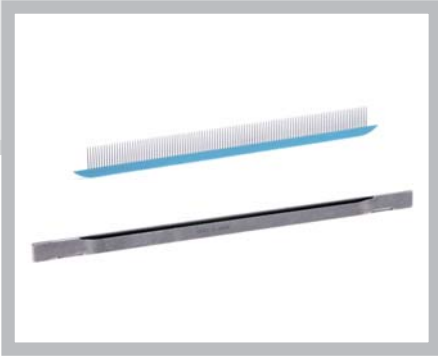
### Example for ordering

System	MONO
Model	S
Machine type	COGNETEX SC400
Pin No.	16x22x15/16
Pins/cm	6 N/cm
Pin field	228 mm

<b>Type</b>	Plastic pin-strip coated with hot melt adhesive
<b>Model</b>	Standard (S)
<b>Properties</b>	Excellent grip Highly resilient All-purpose use Robust Reliable
<b>Range of application</b>	All the rotary head gill boxes listed above irrespective of slot width
<b>Pinning and pin removal</b>	Aids: standard heating device (see page 19)

# PINNING SYSTEM FOR ROTARY HEAD GILL BOXES

## SENZO



### Machine type

COGNETEX SC400/600, SSTR

### Example for ordering

System	SENZO
Model	S
Machine type	COGNETEX SC400
Pin No.	16x22x15/16
Pins/cm	6 N/cm
Pin field	228 mm

### Type

Plastic pin-strip for insertion

### Model

Standard (S) slot sizes: 2.00 – 2.10 mm; slot depth: 8.50 mm

### Properties

No adhesive

No heating

All-purpose use

Robust

Reliable

### Range of application

All the rotary head gill boxes listed above.  
Please note available slot sizes!

### Pinning and pin removal

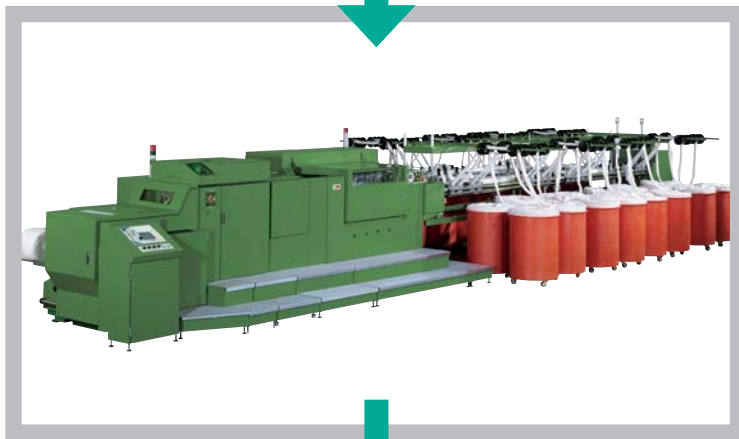
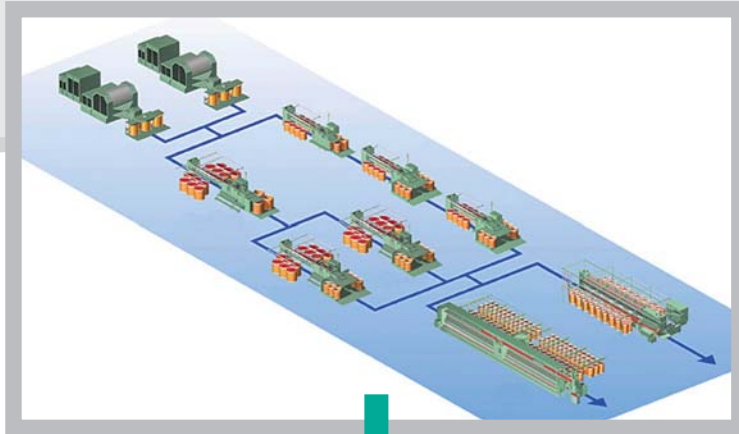
Aids: insertion device (see page 19)

# PINNING SYSTEM FOR ROTARY HEAD GILL BOXES

Pin No.	Pin type	Pins/cm	Pin field
16x15/16	round	3.00	228 mm
16x15/16	round		270 mm
16x15/16	round	4.00	228 mm
16x15/16	round		270 mm
15x21x15/16	flat		228 mm
15x21x15/16	flat		270 mm
17x15/16	round	5.00	228 mm
17x15/16	round		270 mm
16x20x15/16	flat		228 mm
16x20x15/16	flat		270 mm
16x22x15/16	flat	6.00	228 mm
16x22x15/16	flat		270 mm
18x24x15/16	flat	7.00	228 mm
18x24x15/16	flat		270 mm
18x24x15/16	flat	8.00	228 mm
18x24x15/16	flat		270 mm
20x26x15/16	flat	9.00	228 mm
20x26x15/16	flat		270 mm

further dimensions available on request

# ROTARY HEAD GILL BOXES



**2K**



**MONO**

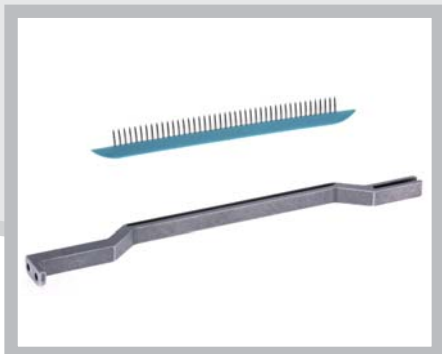


**SENZO**



# PINNING SYSTEM FOR VERTICAL GILL BOXES

## SENZO



**Machine type**  
NSC GV11/20

**Type** Plastic pin-strip for insertion

Pin No.	Pin type	Pins/cm	Pin field
18x24x7/16	flat	4.00	84 mm
18x24x7/16	flat	5.00	85 mm
18x24x7/16	flat	6.00	84 mm
18x24x7/16	flat	7.00	85 mm
18x24x7/16	flat	8.00	85 mm

### Example for ordering

System SENZO  
Model S  
Machine type NSC GV20  
Pin No. 18x24x7/16  
Pins/cm 6 N/cm  
Pin field 84 mm

### Model

Standard (S)

### Properties

No adhesive  
No heating  
All-purpose use  
Robust  
Reliable

### Range of application Pinning and pin removal

All gill boxes mentioned above  
Aids: insertion device (see page 19)

# AIDS FOR PINNING AND PIN REMOVAL

## SENZO



The DREI-S insertion device has been designed specially for SENZO pin-strips.

There are two models available:

- a) operated by electric motor (400 V - 50 HZ, custom voltages on request)
- b) operated by air pressure

## MONO



All pinned faller bars can be prepared using a standard heating device.

## 2B



It is recommended to use an installation plate for gluing in to ensure that the faller bars are inserted at the right angle.

## 2K



It is recommended to use an installation plate together with two-component adhesive and magnetic fixing plates.

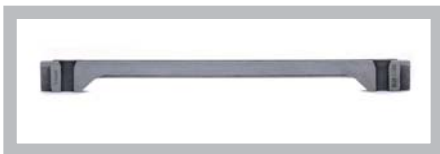
# FALLER BARS AND THEIR PINNING TYPES



## **NSC GC 12/13/14/15/30**

Dimensions: 332 x 13.5 mm  
332 x 17.5 mm  
382 x 13.5 mm  
382 x 17.5 mm

Pinning: OWAS, SENZO, 2B



## **NSC GN4**

Dimensions: 320 x 28 x 6 mm

Pinning: SENZO, MONO, 2K, 2B



## **NSC GN5/6/7**

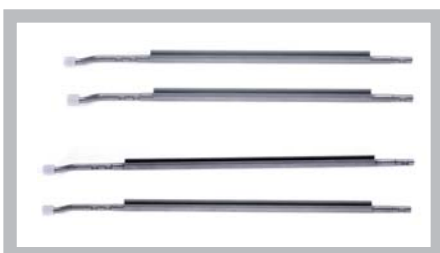
Dimensions: 320 x 23 x 6 mm

Pinning: SENZO, MONO, 2K, 2B



## **NSC GV11/20**

Pinning: SENZO



## **SANT ANDREA ST21**

Dimensions: 364 x 12 mm  
364 x 13 mm  
414 x 12 mm  
414 x 13 mm

Pinning: OWAS, SENZO, 2B



## **SANT ANDREA CSN**

Dimensions: 332 x 13.5 mm  
332 x 17.5 mm

Pinning: OWAS, SENZO, 2B

# FALLER BARS AND THEIR PINNING TYPES



## SANT ANDREA SEUP

Dimensions: 300 x 25 x 6.5 mm

Pinning: SENZO, MONO, 2K, 2B



## SANT ANDREA HC

Dimensions: 197.5 x 12,5 mm HC22  
270.0 x 12,5 mm HC24

Pinning: SENZO



## SANT ANDREA TC3

Dimensions: 365 x 16.5 mm  
365 x 17.5 mm

Pinning: SENZO



## COGNETEX SC400

Dimensions: 328 x 15 x 5.1 mm – 22°  
378 x 15 x 5.6 mm – 22°

Pinning: SENZO, MONO, 2K, 2B



## COGNETEX SC600

Dimensions: 378 x 18 x 5.2 mm – 21°

Pinning: SENZO, MONO, 2K, 2B



## COGNETEX SSTR

Dimensions: 328 x 12 x 5.0 mm – 13° (normal)  
328 x 12 x 5.2 mm – 22° (special)

Pinning: SENZO, MONO, 2K, 2B



## OKK

Dimensions: 316.5 x 22.2 x 7,0 mm

Pinning: SENZO

*From fibre to yarn*



### **Combing machines**

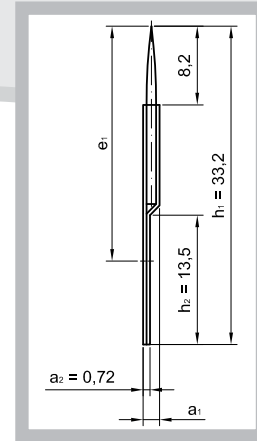
In the course of the combing process all short fibres as well as any impurities should be removed.

The combing process carried out with the help of combing machines is designed to separate the fibre mass into three different categories:

- Top
- Noil
- Fibre fly

# PINNING SYSTEM FOR COMBING MACHINES

## Top comb with pins



### Machine type

NSC PB26-29/PB30-33, OSA P90/P100, Textima

### Type

Metal strip with pins

Pins/cm	N. Schlumberger		Sant Andrea	Textima
	PB26 - PB29	PB30 - PB33	P90/P100	
14	470	470	460	460
16	470	470	460	460
18	470	470	460	460
21	470	470	460	460
23	470	470	460	460
25	470	470	460	460
26	470	470	460	460
28	470	470	460	460
30	470	470	460	460
32	470	470	460	460
Pin taper	8.2	8.2	8.2	8.2
	9.2	9.2	9.2	9.2
	10.2	10.2	10.2	10.2

### Example for ordering

System	Fixed comb
Model	S
Machine type	NSC PB30
Pin taper	8.2
Pins/cm	28 N/cm
Pin field	470 mm

### Models

Standard (S),  
Displaced plates (V)

### Properties

Excellent combing out of fibre tuft ends  
Long lasting  
Simple replacement

### Range of application

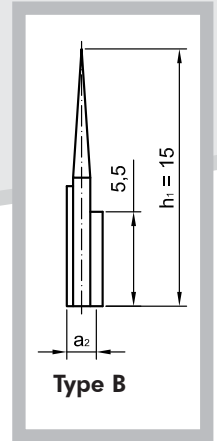
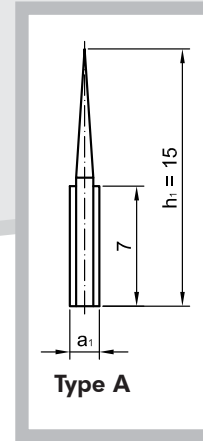
All the combing machines listed above

### Pinning and pin removal

No additional equipment needed

# PINNING SYSTEM FOR COMBING MACHINES

## Circular comb with pins



### Machine type

NSC PB26-29/PB30-33, OSA P90/100, Textima

### Type

Metal strip with pins (to be clamped)

Pins/cm	Type		N. Schlumberger		Sant Andrea	Textima
	A $a_1$	B $a_2$	PB26 - PB29	PB30 - PB33	P90/P100	
4	2.0	2.5	430	440	430	444
6	2.0	2.5	430	440	430	444
7	2.0	2.5	430	440	430	444
8.5	2.0	2.5	430	440	430	444
10	2.0	2.5	430	440	430	444
11	2.0	2.5	430	440	430	444
12	2.0	2.5	430	440	430	444
14.2	2.0	2.5	430	440	430	444
14.1	1.0	1.4	430	440	430	444
15	1.0	1.4	430	440	430	444
16	1.0	1.4	430	440	430	444
17	1.0	1.4	430	440	430	444
18	1.0	1.4	430	440	430	444
19	1.0	1.4	430	440	430	444
20	1.0	1.4	430	440	430	444
21	1.0	1.4	430	440	430	444
22	1.0	1.4	430	440	430	444
24	1.0	1.4	430	440	430	444
25	1.0	1.4	430	440	430	444
26	1.0	1.4	430	440	430	444
28	1.0	1.4	430	440	430	444
29	1.0	1.4	430	440	430	444
30	1.0	1.4	430	440	430	444
32	1.0	1.4	430	440	430	444

### Example for ordering

System	Circular comb with pins
Model	Typ A
Machine type	NSC PB30
Pins/cm	14 N/cm
Pin field	440 mm

### Model

Type A und Type B

### Properties

Excellent combing out of fibres  
All-purpose use  
Reliable

### Range of application

All the combing machines listed above

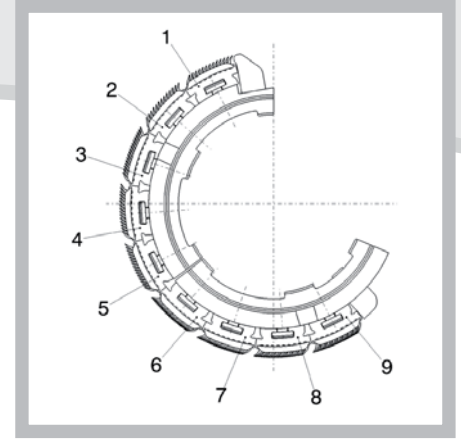
### Pinning and pin removal

No additional equipment needed

# PINNING SYSTEM FOR COMBING MACHINES

## WOOLCOMB

## Circular comb with wire



**Machine type**  
NSC PB30/31/32/33

**Type** Aluminium base element equipped with segments consisting of full steel teeth

Tooth density (teeth/inch)	Forward operating angle	Base width of profile (in mm)	Offset	Designation
G = 7	35°	1.5	2	G.35.1.5.2
G = 7	35°	1.2	2	G.35.1.2.2
G = 7	35°	0.9	2	G.35.0.9.2
G = 7	35°	0.7	2	G.35.0.7.2
G = 7	35°	0.6	2	G.35.0.6.2
J = 9	40°	0.6	2	J.40.0.6.2
J = 9	40°	0.35	2	J.40.0.35.2
H = 8	45°	0.5	2	H.45.0.5.2
H = 8	45°	0.4	2	H.45.0.4.2
H = 8	45°	0.35	2	H.45.0.35.2
G = 7	35°	0.9	3	G.35.0.9.3
G = 7	35°	0.7	3	G.35.0.7.3
G = 7	35°	0.6	3	G.35.0.6.3
H = 8	45°	0.5	3	H.45.0.5.3
H = 8	45°	0.4	3	H.45.0.4.3
H = 8	45°	0.35	3	H.45.0.35.3
J = 9	40°	0.6	3	J.40.0.6.3
J = 9	40°	0.35	3	J.40.0.35.3
J = 9	45°	0.35	3	J.45.0.35.3
J = 9	40°	0.35	4	J.40.0.35.4
J = 9	45°	0.35	4	J.45.0.35.4

### Example for ordering

System WOOLCOMB  
Model S  
Machine type NSC PB30  
Designation J.45.0.35.4

### Model

Standard (S)

### Properties

Excellent combing out of fibres with minimal waste  
Long lasting  
Low weight (aluminium base element)  
Simple replacement

### Range of application

All the combing machines listed above

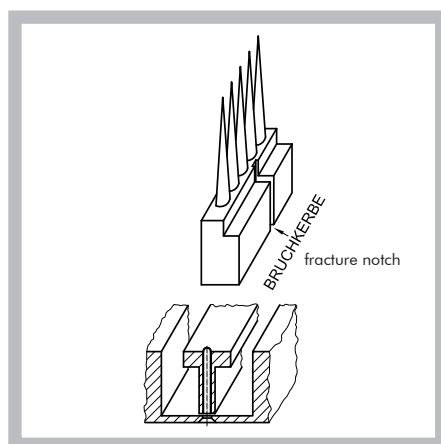
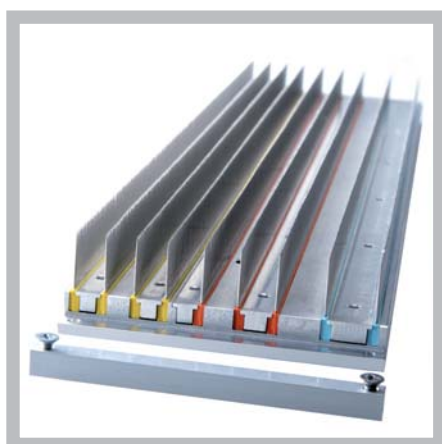
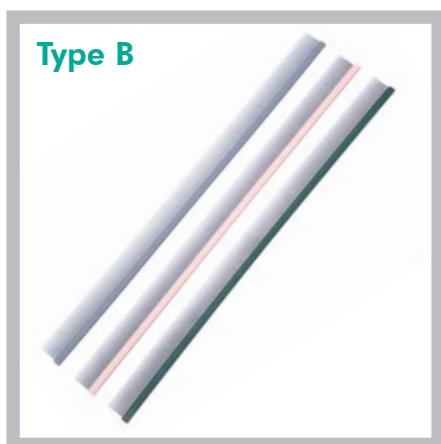
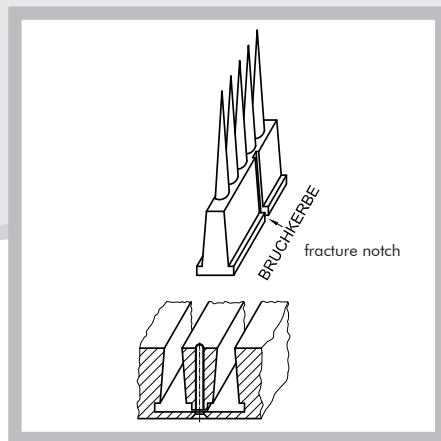
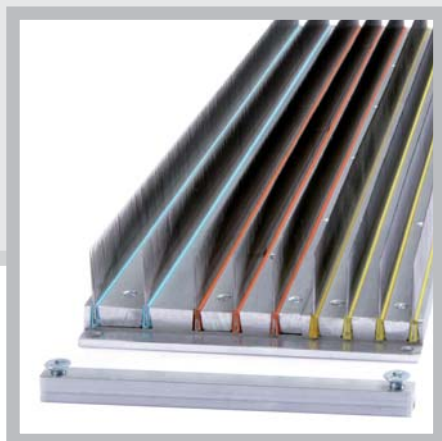
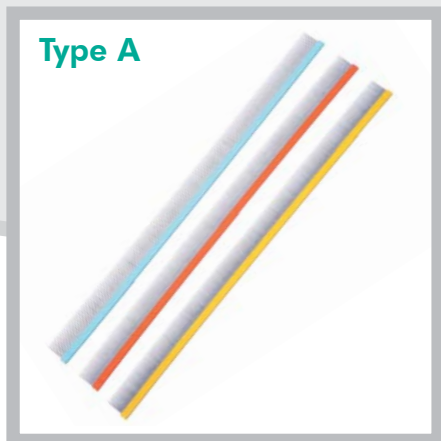
### Pinning and pin removal

No additional equipment needed

# PINNING SYSTEM FOR COMBING MACHINES

## SUCO

## Pinning system for feed combs



### Machine type

NSC PB26-29/PB30-33/ERA, OSA P90/P100/MILLENIUM

### Example for ordering

System	SUCO
Model	Typ A
Machine type	NSC PB32
Pin No.	20/26
Pins/cm	4.0 N/cm
Pin field	410 cm

### Type

Plastic pin-strip for insertion into aluminium base

### Model

Type A und Type B

### Properties

No adhesive  
No heating  
All-purpose use  
Robust  
Reliable

### Range of application

All the combing machines listed above

### Pinning and pin removal

No additional equipment needed

# PINNED PRODUCTS

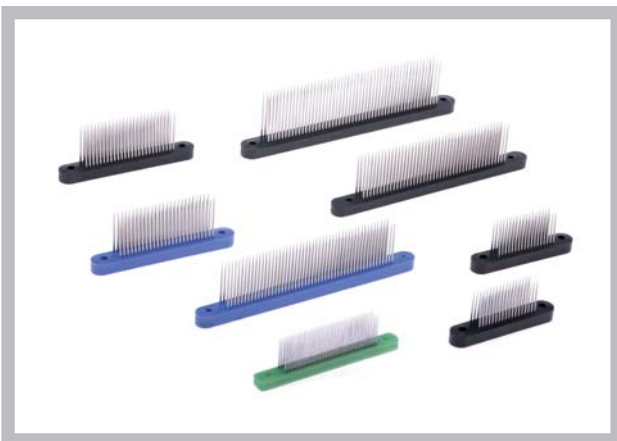
*Pin plates for tenters*



*OE-opening cylinders/  
perforation cylinder*



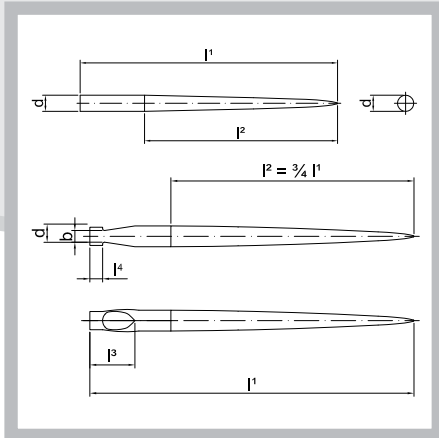
*Nygills for flax combing*



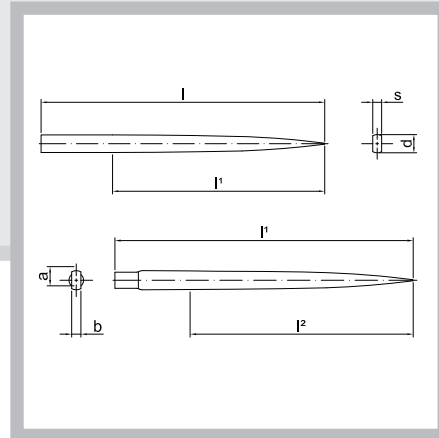
*Temple for weaving machines*



### Round pins



### Flat pins



Round pins are available in the following three design types:

Model A:

Round pins for gill and drafting machines

by which:

$l^2 = 2/3 l$  for 05.56 mm – 17.46 mm

$l^2 = 3/4 l$  for 19.05 mm – 50.80 mm

Model B:

Hackle pins for bast fibre spinning

machines by which:

$l^2 = 1/2 l$

Model C:

Card pins

by which:

$l^2 = 1/4 l$

For which:

$l^2 = 2/3 l$  for 09.53 mm – 17.46 mm/

$l^2 = 3/4 l$  for 19.05 mm – 28.58 mm

### Industrial pins

We manufacture other pins both for the textile industry and other sectors according to customer specifications and using a very wide variety of steels. The maximum pin diameter is 3.4 mm. Pin types include bent round and flat pins, U-shaped pins, pins with feet and all possible tip shapes can be supplied.

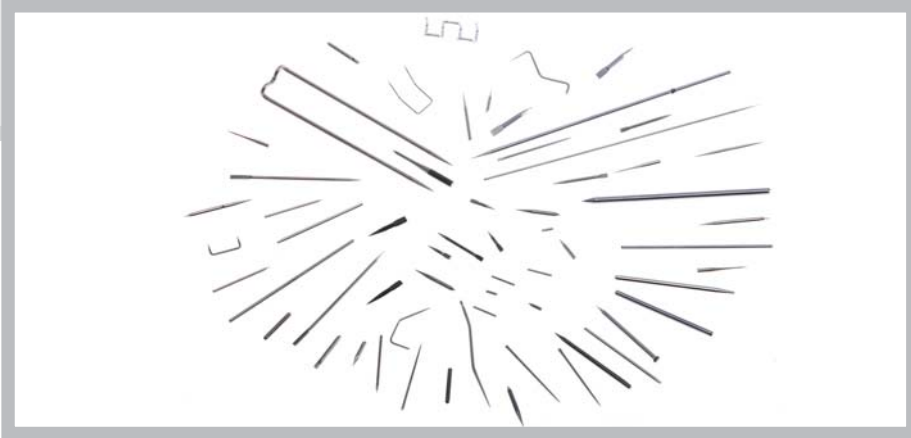
**Examples for use:** Pins for drawing instruments, perforating pins, roughing pins, cable forming pins, tattooing pins etc.

**Materials:** Free machine steels (e.g. 1.0618)  
Tooling steels (e.g. 1.3505, 1.2516, 1.2067)  
Rust-free, acid resistant steels (e.g. 1.4034, 1.4112, 1.4301, 1.4310)

**Material diameter:** 0.35 mm - 3.40 mm

**Length:** 2.50 mm - 350.00 mm

# AXLES - SHAFTS



We manufacture axles, shafts and finished parts according to customer specifications from a wide variety of steels (as per pattern or drawing) and up to a diameter of 3.40 mm.

## **Examples for use:**

Axles and shafts for the automobile supplies industry

Screwdriver blades

Axles and shafts for the toy industry

Electric motors, consumer electronics

Household appliances as well as data gathering

Measuring and controlling technologies

## A Tradition of innovation

The DREI-S-WERK was founded in 1850 as the 'Schwabacher Spinnereinadel und Stahlspitzenwerk Fr. Reingruber KG' for the purpose of manufacturing pins for the textile industry. Over the years what began as a simple workshop expanded into an industrial enterprise which leads the world in the production of pin systems. In 1940 the company expanded into the sector of precision standard parts manufacturing. To this day, DREI-S-WERK supplies precision parts to the machine and motor manufacturing industries as well as for tooling and moulding applications.

The DREI-S-WERK has remained a traditional family business; today there are 120 employees at the firm's headquarters in Bavaria under the management of Till M. Schmauser.

Our modern plant produces pins and pin-strip systems, but also axles, shafts and ground parts as well as wearing parts for perforating a variety of different materials. We also manufacture to customer specifications.

DREI-S-WERK is one of the world's foremost manufacturers of pin-strip systems for drawing frames and combing machines. Through close cooperation with leading textile research institutes and with our customers we remain at the cutting edge of this sector's development and are able to meet the changing demands of the market as they arrive.

We are especially proud of the technological highlight which we achieved in 1994 with the development of the SENZO® pin-strip system. And with our newest product line, the OWAS® pin-strip system, we have set more new standards in respect of longevity, productivity and cost reduction for a new generation of faller bars.



DIN EN ISO 9001:2000

Zertifikat: 01 100 80420

## Always one step ahead

DREI-S is the only manufacturer in the world which is in a position to supply five different pin-strip systems for drawing frames:  
2K, 2B, MONO, SENZO®, OWAS®

More than 150 years of industrial production provide the basis for our experience and creativity. It is a matter of importance to us that our DREI-S staff is enthusiastic, able to take on responsibility, able to cooperate as a team and always open for new product and production ideas. These factors drive our success!

### DREI-S-WERK Präzisionswerkzeuge GmbH & Co. Fertigungs KG

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