Donner + Pfister AG Technology for Industry

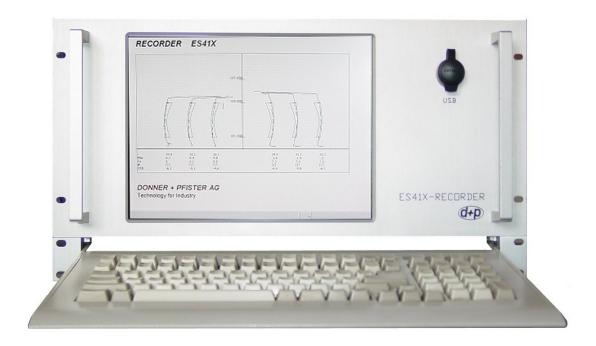
CH-8855 NUOLEN Switzerland

www.dpag.ch



ES41X RECORDER

Plug in replacement of MAAG	ES-410
	ES-411
	ES-412
	ES-415
	ES-416

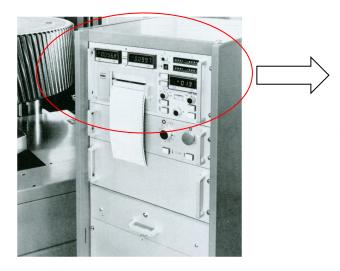


The measuring instrument

RECORDER ES-41X

Plug-In Replacement for MAAG Measuring and Recording Unit: ES-410/ES-411/ES-412/ES-415/ES-416

Of the Gear Measuring Machines: SP60/SP130/SP160/SP200 Series





ES-41X Recorder 19" Unit Inbuilt graphic and evaluation

Test results and their analysis on standard A4 or Letter paper:

Profile Helix Crown

 $\begin{array}{l} \mathsf{F}_{\alpha},\,\mathsf{f}_{f\alpha}\,,\,\mathsf{f}_{H\alpha}\,,\mathsf{f}_{H\alpham} \\ \mathsf{F}_{\beta},\,\mathsf{f}_{f\beta}\,,\,\mathsf{f}_{H\beta}\,,\,\mathsf{f}_{H\beta}\,,\mathsf{f}_{H\betam} \\ \mathsf{C}_{\alpha},\,\mathsf{C}_{\beta} \end{array}$

-Quality numbers as per ISO, DIN, AGMA.. -Inch and roll degree

With optional software on USB memory-stick : -Tolerance bands -Design curves -Preparation of data

Accessories: -Keyboard -Laser Printer -USB memory-stick for storing documents in PDF format



ES-41X Recorder 19" Unit with keyboard in a SP130

Operation

Measurement	Identification		Inspection Flank	1
	Customer	perfect gear	Standard <>	DIN3962
New [N] Load [L]	Order number	124.1256.43	Unit <>	metric
	Drawing number	32.te	Quality	5
Delete [D] Save [S]	Modification date		Inspection Profile	1
	Modification index			Profile Evaluatio
Print (P)	Ident number 1		Profil Evaluation Start	006.000
eura (e)	Ident number 2		Profil Evaluation End	019.480
Gear data exchange	Ident number 3		Their Evaluation End	010.400
Load Save	Manufacturer		Indication <>	generating
road pare	Processing status		indication of	generating
	Number of gear		Marker1	000.000
-m	Part name		Marker2	000.000
-T-65	Serial number		Marker3	000.000
- 198	Geometry		Marker4	000.000
Test	Kind of gear <>	workpiece	Inspection Helix	1
-test2	External internal <>	extern	inspection Helix	Helix Evaluation
-test43	 Number of teeth 	43	Helix Evaluation Start	neix Evaluation
anote:	Normal module	001.75000	Helix Evaluation Start	019.800
V1	Pressure angle	015.00000	Helix Evaluation End	019.000
V10	Pressure angle flank <>	both	Marker1	010.010
V100	 Helix angle 	030.00000	Marker2	000.000
V101 V102	Helix angle direction <>	right	Marker2 Marker3	000.000
V102 V11	Helix angle flank <>	both		
V12	Facewidth	022.000	Marker4	000.000
V13	Tip diameter	093.250	CHECK DATA bd = 083.00883 [mm]	
V14	Root diameter	083.000		

The operator is guided through the setting up and the measurement where the tuition time is minimal.

• Filter Analog (Hz): 0 Probe radius: 0.6 Probe Offset X : 027.292mm R Y : 030.792mm XT: 000.013mm X Mean curve X Design curv X Tolerance has X Print po ok ok 1 X 24 X 2HR 0.000 Profile L at Z OK 1PL 10.200 X 2PL 0.000 X 3PL 0.000 Х 3н 10.200 OK 1PF X 3HR 0.000 X 2PR 0.000 X 3PR 0.000

The quality of the gear is easily determined by the evaluation software to ISO, DIN or AGMA standards.

Online display during measuring.

For documentation the results can be printed out via standard laser printer or stored to the USB memory stick as a PDF.

 Image: State of the s

FILE [F1] SET UP [F2] PROFILE [F3] HELIX [F4] TOLERANCE BANDS [F6] DESIGN CURVES [F7]

HMI:

Interfaces:

Quality numbers as per :

Test results and their analysis:

Graphic representation:

Input:

Net weight (approx.):

Dimensions of ES4100 unit:

Power Requirements:

2 x USB; 1 x Ethernet ISO 1328, AGMA 2000, 2015 and DIN 3962 Profile $F_{\alpha}, f_{f\alpha}, f_{H\alpha}, f_{H\alpham}$ Helix $F_{\beta}, f_{f\beta}, f_{H\beta}, f_{H\betam}$

Interactive Touch panel and Keyboard

Up to 4 teeth with 3 sections

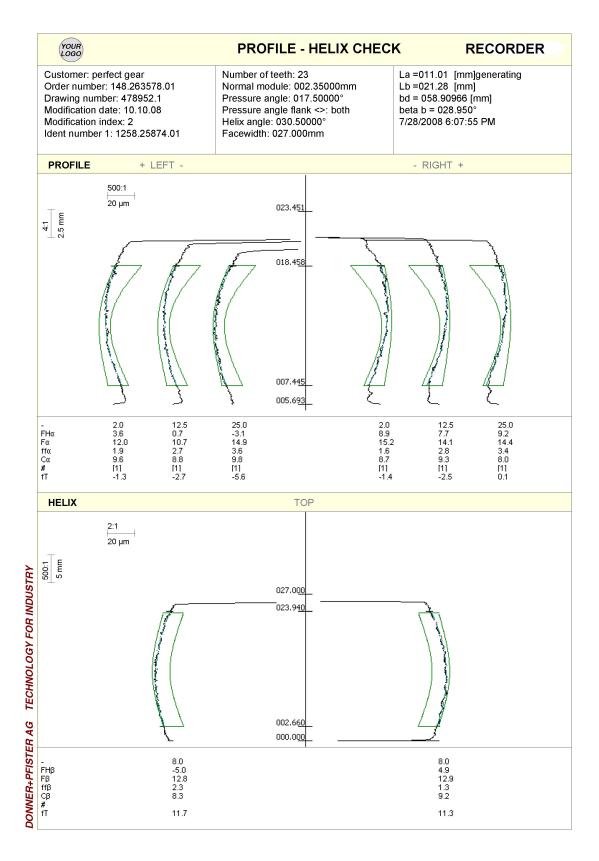
Roll degree, path of generation, radius or diameter Inch or metric.

 C_{α}, C_{β}

12 kg	26.4 lbs.	
482 x 222 x 405	18.9" x 8.7" x 15.9"	
110 / 220 Volts, 50/60 Hz. ± 10 %		

Crown

The result



The company



DONNER + PFISTER AG KIRCHWEG 5 CH-8855 WANGEN-NUOLEN

SWITZERLAND

1989 Foundation of the d + p AG. d+p is a Ltd. Co. with a share capital of SFr. 100'000 .-. Development of the prototype control system for gear grinding machines. 1992 Occupation of the new building in Nuolen. Development and manufacture of control systems for gear grinding machines in world-wide operation. 2000 Development of electronically generation head. 2001 Occupation of the new workshop in Wangen. 2002 Development of pitch measuring device ES4100 2004 Certification IS0 9001:2000 2005 Development of conical involute grinding 2006 Development of new CNC version V3 2007 Development of new pitch measuring device ES4100 2008 Development modernizing MAAG SP42, ES430 and ES Recording-Unit

2012

Development of Hob checking control

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REG.NO.:30760