Screwdriving technology | Automation | Air motors | Air tools

DEPRAG

Services

By selecting a DEPRAG product, you can be assured to receive the highest possible quality and most advanced technology.

We gladly support you with our extensive After-Sales-Service in the areas of Screwdriving Technology, Automation, Air Motors and Industrial Power Tools.

Our products and services:

- Torque Adjustment on Screwdrivers
- Screw Joint Analysis
- Cmk – Machine Capability Study
- Calibration
- Power Curve Analysis
- Training
- Service by Remote-Access
- Maintenance and Upkeep
- Service-Hotline 24/7

D 3330 E 07.2015

OVERVIEW


Servicemanager, Service-Hotline, Spare parts service

Your Service contact:

Service Manager
Mr. Siegert,
Phone +49 (0) 9621 371 256

Service Hotline
Phone +49 (0) 700 00 371 371
24 Hours - 365 Days

Service Hotline - Your direct link to our Service

The best and most economical procedure to solve any service request to the full satisfaction of our customer and within the fastest time possible is to establish a phone connection between our competent service personnel and the customer's technician who may have actually been trained by DEPRAG on the supplied system.

If the service issue cannot be solved over the phone, then our service department will immediately take steps to find a solution. According to the contractual agreement with the customer, DEPRAG may dispatch a service technician if the place of service is local.

The primary service contact at DEPRAG Germany is the Service Manager: Mr. Siegert, who can be reached at +49 (0) 9621 371 256.

Our service technicians will always give phone support. For exceptional cases, we can also provide service personnel, which is on stand-by.

If a service issue arises outside the standard working hours, then a HOTLINE staff-member will accept calls at + 49 (0) 700 00 371 371. Our Service Department will contact you promptly on the next working day.

For all standard component deliveries, we refer to our delivery terms and request that a defective item is returned to us.

Our trained personnel performs required maintenance, installation- or rebuilding as well as testing directly on-site.

Alternative, we would like to offer one of our professional training courses for your own staff to learn about the necessary basics in maintenance, processing documentation, error removal and product changes. This allows you to react to requirement changes internally.

We recommend that our customer stocks the general wear- and spareparts at his own facility to minimize downtimes.

Spare Parts Service - the continued protection of your production

- **fast**
- **cost-effective**
- **safe**
- **in-house core competence**

The permanent, perfect operation of your machine is of high importance to us. Therefore, we continuously are looking for possibilities to further expand our spare-parts- and maintenance offer.

We can offer a contract that assures the flexible and no-cost spare parts guarantee for up to 2 years and then offer that you will be able to obtain for up to 10 years after delivery of your machine, spare parts and wear items.

Standard components are shipped immediately. Custom-made parts can be produced in an unmatched short time period.

Especially helpful is that through the various, in-house production, additional costs for services such as laser-welding, eroding, supply, or transportation, are not necessary.

Torque Adjustment with the delivery of your screwdriver

Principally, all DEPRAG pneumatic screwdrivers are set - on delivery - to the maximum torque.

If required, DEPRAG will gladly preset any screwdriver to a defined torque.

Messprotokoll

Measurement Report

DEPRAG

DEPRAG SCHULZ GMBH u. CO.
Postfach 1352, D-92203 Amberg
Carl-Schulz-Platz 1, D-92224 Amberg
Tel. (0 96 21) 371-0, Fax (0 96 21)371-120
Internet: www.deprag.com
e-mail: info@DEPRAG.de
Leiter Qualitätswesen: Herr Heinrich

Auftragsnummer: *Order - no.:*	**34-25396/1**	**einzustellendes Drehmoment** *torque setting:*	**1,3 Nm**
Schraubertyp: *Screwdriver type:*	**347Z-528**	**Seriennummer:** *Serial - no.:*	**1212538**
Schraubsteuerelektronik: *Controller Type:*		**Seriennummer:** *Serial - no.:*	
Referenzmessgerät: *Reference measuring device:*	**DME 200**	**Referenzmessplattform:** *Reference measuring platform:*	**MP 200**
Seriennummer vom Referenzmessgerät: *Serial-no. of reference mearsuring device:*	**845940**	**Seriennummer der Referenzplattform:** *Serial-No. of reference measuring platform:*	**337907**

Meßwert 1	*Measured value 1*	1,32	Nm
Meßwert 2	*Measured value 2*	1,30	Nm
Meßwert 3	*Measured value 3*	1,30	Nm
Meßwert 4	*Measured value 4*	1,31	Nm
Meßwert 5	*Measured value 5*	1,31	Nm
Meßwert 6	*Measured value 6*	1,30	Nm
Meßwert 7	*Measured value 7*	1,31	Nm
Meßwert 8	*Measured value 8*	1,30	Nm
Meßwert 9	*Measured value 9*	1,30	Nm
Meßwert 10	*Measured value 10*	1,29	Nm
Mittelwert M	*Average*	1,304	Nm
Standardabweichung s (+/-)	*Standard deviation*	0,008	Nm
rel. Standardabweichung %	*rel. Standard deviation %*	0,65%	%

Messungen durchgeführt durch: *Measuring conducted by:*

Datum: **2.7.2013** *Date:*

Anmerkungen / Remarks:

Die verwendeten Normale zur Kalibrierung der Referenzmeßgeräte sind rückführbar an die Pysikalisch-Technische Bundesanstalt.
The used standards for calibration of the reference measuring instrument are traceable to the National Federal Authority of Physics and Technique. (Physikalisch-Technische Bundesanstalt)

ISO 9001 zertifiziert
ISO 9001 certified

Stand 12/2011 Fo 3.3/007

Calibration certificate of a measuring series with 10-cycles

Your advantages:

- you receive process reliable
- comprehensive documentation
- which is traceable to National Standards

You will receive a corresponding calibration certificate.

The calibration with a measuring platform (transducer) and a measuring instrument, consists of a measuring series with 10 cycles and documents

- the individual torque values
- the corresponding average torque
- and the absolute and relative standard deviation
- as well as details of the used reference materials.

Screw Joint Analysis - Safety for accurate tightening parameter, sequences and tools

- Determining the optimum process parameter
- Process Reliability right from the start
- Analyzing settling conditions

In the screw-joint analysis it is all about the question:

- What is the ideal torque for the screw assembly?
- Which rotation speed should be applied?
- What type of screwdriving tool best fits the task?

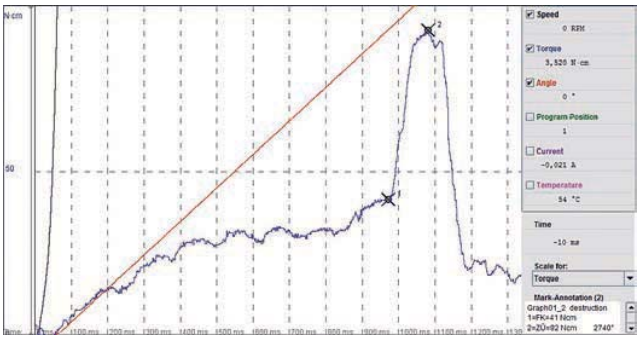
Inline DMS transducers in combination with DEPRAGs sophisticated measuring systems provide torque measurement, screw joint analysis and data collection techniques to the highest standard for optimal quality assurance.
The screw joint is analysed a series of screw assemblies on the original component. Using graphic diagrams the essential parameters of the screwdriving process, such as tapping torque, head seat and over-torque can be determined.
At the end of this test series, after careful analysis, the results are made available for the manufacturer to see which screwdriving parameters and type of screwdriving tool are most suitable for this particular screw assembly task.

Standard Analysis

To determine a screwdriving process and the best-suited shut-off torque of our screwdrivers, we can perform a standard analysis.

When considering all the values influencing a screwdriving process, such as material of the parts to be assembled, washers, screw threads, required cycle time, etc., a suitable screwdriver can be selected. The parts to be assembled will be fixtured in the same manner as in an actual production run. Thereafter, the screw is tightened using a screwdriver with a torque far above the expected seating torque, so that the connection is over-torqued and fails. The result may be that – according to the constructive layout of the screw joint – the screw gets torn up or the thread is stripped.

During this process, the torque, the cycle time and maybe even the angular displacement, is acquired, documented and stored. The torque is displayed in a diagram.



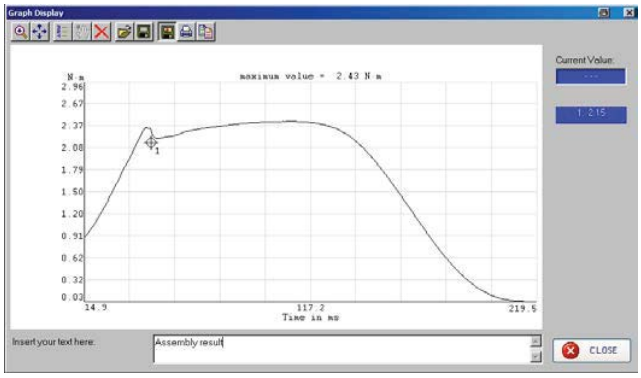
The diagram, showing a curve of the screwdriving process, can now easily be evaluated and the best possible processing parameter for an automatic screwdriver can be determined.

Special Analysis

This analysis uses the torque/angle measurement procedure.

The screw connection is tightened with an increased torque and then turned to a corresponding angle. This method allows us to obtain the breakaway torque, the actually applied torque, as well as any settling of the joint, which can easily be recognized.

Again, the analysis is displayed using graphics.



We require the following components for a complete Screw Joint Analysis:
– 5 complete sample parts – 20 required sample screws (for each screw location)

Machine Capability Study

DEPRAG Schulz GmbH u. Co.
03.11.10

DEPRAG

Maschinenfähigkeitsuntersuchung
MACHINE CAPABILITY CALCULATION

Schraubertyp: *Screwdriver type:*	310E30-002	Fabrikationsnummer: *serial nr.:*	1152970/10
C-Wert: *Calibration value:*	115,0	Leerlaufdrehzahl: *speed, idling:*	U/min *rpm*
C-Offset Wert: *Calibration offset value:*	0,0038	Drehzahl Voranzug : *rpm1 (insertion procss)*	U/min *rpm*
Sollwert in Nm: *Norminal value in Nm:*	0,5	Drehzahl Endanzug : *rpm 2 (tightening process)*	50 U/min *rpm*

Referenzmessgerät: *Reference measuring instrument:* DME 200
Referenzmesswertaufnehmer: *Reference transducer:* MP25PE

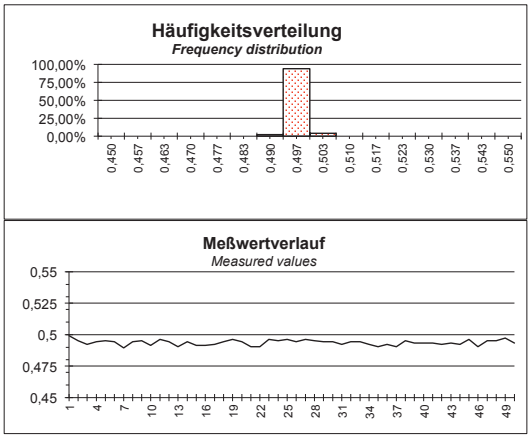
Auswertung *Calculation*

Meßwert-Nr.: *Measured value n.*	Meßwert in Nm *Measured value in Nm*
1	0,4992
2	0,4953
3	0,4924
4	0,4944
5	0,4953
6	0,4944
7	0,4895
8	0,4944
9	0,4953
10	0,4914
11	0,4963
12	0,4944
13	0,4905
14	0,4944
15	0,4914
16	0,4914
17	0,4924
18	0,4944
19	0,4963
20	0,4944
21	0,4905
22	0,4905
23	0,4963
24	0,4953
25	0,4963
26	0,4944
27	0,4963
28	0,4953
29	0,4944
30	0,4944
31	0,4924
32	0,4944
33	0,4944
34	0,4924
35	0,4905
36	0,4924
37	0,4905
38	0,4953
39	0,4934
40	0,4934
41	0,4934
42	0,4924
43	0,4934
44	0,4924
45	0,4963
46	0,4905
47	0,4953
48	0,4953
49	0,4973
50	0,4934

Mittelwert M= *Average=*	0,4938	Nm
Standardabweichung S= *Standard deviation=*	0,0021	Nm
relative Standardabweichung: *Relative standard deviation=*	0,43	%

die max. zul. Standardabweichung beträgt +/- 3%

Oberer Grenzwert OGW= *Upper Tolerance Value UTW=*	**0,55**	Nm
Unterer Grenzwert UGW= *Lower Tolerance Value LTW=*	**0,45**	Nm
Maschinenfähigkeit Cm= *maschine capability Cm=*	***7,92***	
Maschinenfähigkeitsindex Cmk= *maschine capability index Cmk =*	***6,94***	



Änderungsstand 10/09 Fo4.9/012

Prüfer *tester*

Machine Capability Study Protocol

An extensive inspection within the limits of a Machine Capability Study, takes place by means of regularly tested reference-transducers.

For electric tools, we can also offer a Machine Capability Study for their angular-displacement.

A Machine Capability Study is the testing of a machine in regards to its suitability for a special production- or tightening task.

Contrary to the Machine Capability Study, a Process Capability Study (Cpk) can only be performed directly on the assembly line and under inclusion of all influencing factors of the screwdriving process.

By stating a Cmk-value, a clear statement in regards to the machine capability is possible.

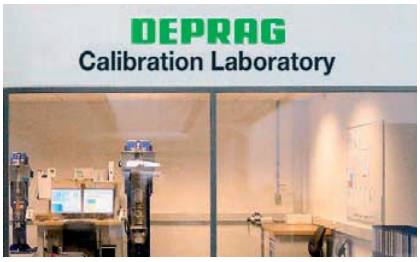
A Cmk-value of 1.67 means, that 99.99994 percent of the assemblies are within the allowable tolerances.

Calibration Service

Calibration is not only a required regulation of the Norm DIN EN ISO 9001:2008, but it also helps to guarantee the constant high quality of your product.

DEPRAG has an accredited, in house Calibration Laboratory, where for example DAkkS-calibrations according to DIN 51309 for passive transducers are performed.

- process reliable
- precise
- DIN EN ISO 9001:2008 conform
- DIN EN ISO/IEC 17025:2005 conform
- standardized calibration methods



Testing and Calibration of your Test Devices

A calibration at DEPRAG assures the reliable measuring results of the test devices use in your facility. Competent service with the required traceability to National Standards.

DEPRAG has an accredited Calibration Laboratory, through which the calibration of torque ranging from 0.01 Nm to 500 Nm can be traced back by varied calibration methods with the highest measurement reliability.
To assure the measurement quality of your screw-connections during production, we also offer besides our calibration laboratory also the Factory Calibration of a complete measuring chain.

For how long is the calibration valid?

Principally, any calibration is only valid at the time it is done. The establishing of calibration intervals lies solely with the user.

The application, meaning the environmental conditions at the production area, the machine workload, the frequency and the safety requirements of the product to be assembled, are of vital influence to establish calibration intervals.
If equipment is to be installed into mass production areas, then it is certainly more appropriate, to establish shorter calibration intervals, compared to equipment that is only used in a calibration laboratory.

The general rule is to set test cycles between approximately 3 months to 3 years.

We recommend to recalibrate our measuring systems at least once per year.

DEPRAG

DEPRAG SCHULZ GMBH u. CO.

Kalibrierlaboratorium für die Messgröße Drehmoment
Calibration laboratory for the measuring quantity torque

akkreditiert durch die / *accredited by the*

Deutsche Akkreditierungsstelle GmbH

ilac-MRA DAkkS Deutsche Akkreditierungsstelle D-K-18255-01-00

als Kalibrierlaboratorium im / as calibration laboratory in the

Deutschen Kalibrierdienst DKD

1217
D-K-18255-01-00
2015-03

Kalibrierschein
Calibration certificate

Kalibrierzeichen
Calibration mark

Gegenstand: *Object:*	**Drehmomentaufnehmer**
Hersteller: *Manufacturer:*	**LAHTI PRECISION OY**
Typ: *Type:*	**TT1 / 5 N·m**
Fabrikat/Serien-Nr.: *Serial number:*	**# 38007-07**
Auftraggeber: *Customer:*	**D-K-18255-01-00 Carl-Schulz-Platz 1 D-92224 Amberg**
Auftragsnummer: *Order No.:*	**Zwischenprüfung 03.03.2015**
Anzahl der Seiten: *Number of pages:*	**6**
Datum der Kalibrierung: *Date of Calibration:*	**2015-03-03**

Dieser Kalibrierschein dokumentiert die Rückführung auf nationale Normale zur Darstellung der Einheiten in Übereinstimmung mit dem Internationalen Einheitensystem (SI). Die DAkkS ist Unterzeichner der multilateralen Übereinkommen der European co-operation for Accreditation (EA) und der International Laboratory Accreditation Cooperation (ILAC) zur gegenseitigen Anerkennung der Kalibrierscheine.
Für die Einhaltung einer angemessenen Frist zur Wiederholung der Kalibrierung ist der Benutzer verantwortlich.

This calibration certificate documents the traceability to national standards, which realize the units of measurement according to the International System of Units (SI).
The DAkkS is signatory to the multilateral agreements of the European co-operation for Accreditation (EA) and of the International Laboratory Accreditation Cooperation (ILAC) for the mutual recognition of calibration certificates.
The user is obliged to have the object recalibrated at appropriate intervals.

Dieser Kalibrierschein darf nur vollständig und unverändert weiterverbreitet werden. Auszüge oder Änderungen bedürfen der Genehmigung sowohl der Deutschen Akkreditierungsstelle GmbH als auch des ausstellenden Kalibrierlaboratoriums. Kalibrierscheine ohne Unterschrift haben keine Gültigkeit.

This calibration certificate may not be reproduced other than in full except with the permission of both the Deutsche Akkreditierungsstelle GmbH and the issuing laboratory. Calibration certificates without signature are not valid.

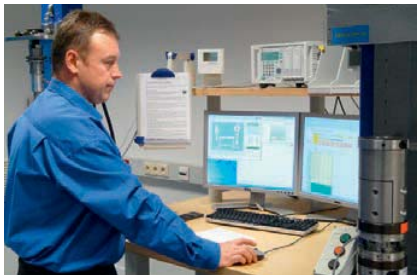
Datum *Date*	Leiter des Kalibrierlaboratoriums *Head of the calibration laboratory*	Bearbeiter: *Person in charge:*
2015-03-03	C. Rosenkranz	M. Sieber

Kalibrierlaboratorium
DEPRAG SCHULZ GMBH u. CO.
Carl-Schulz-Platz 1
D-92224 Amberg

Telefon: +49-(0) 96 21 / 3 71-0
Telefax: +49-(0) 96 21 / 3 71-1 99
E-Mail: cal-lab@deprag.de

Calibration Certificate

Calibration Service



Calibration Service for Test Equipment - for torque ranges 0.01 Nm to 500 Nm.

After in-depth testing and recalibration the platform or measuring instrument is returned to the manufacturer along with a factory- or DAkkS calibration certificate on which the exact details of the calibration test results and the corresponding measurement uncertainties are documented.

You may rest assured that your testing equipment controls the quality of your screw-connections throughout the production process.

Services in our Calibration Laboratory DAkkS, D-K-18255-01-00

Calibration of DEPRAG measurement transducers
In the accredited calibration laboratory, DakkS and factory calibrations of torque measurement transducers can be carried out in accordance with validated procedures. Documentation of the results is provided through a calibration certificate which contains all measurement values and any relevant measurement uncertainties. The complexity level of the calibration procedure can be chosen depending on each case and the permissible measurement uncertainty. The level of complexity can differ depending on the direction of stress, the number of mounting positions and also the number of potential measurement uncertainties attainable. Measurement transducers based both on strain gauge and piezo technology can be calibrated. The calibration is carried out either in accordance with DIN standard DIN 51309 or VDI/VDE 2646 (calibration procedure). Calibration is usually carried out over 10%-100% of the measurement range on eight varied torque levels.
Calibration equipment for the torque range 0.01 Nm – 25 Nm as well as 5 Nm – 500 Nm is available.
All measurement transducers manufactured by DEPRAG are calibrated in the factory in the standard measurement range. This range for each transducer can be found in the brochure D3020E. Specialist calibration for other measurement ranges is also available on request.
Measurement system analysis is also still available as described below:

- Analysis of the capability of a measurement system torque transducer with measurement electronic
- Carried out in DakkS accredited calibration laboratory (DIN EN ISO/IEC 17025)
- Use of traceable torque calibration equipment
- Implementation of procedure 1, measurement series with 50 measurement values
- Calculation of the parameters Cg and Cgk, capability evidence for required tolerance
- Test torque in accordance with customer requirements within the calibrated measurement range of the torque transducer

Calibration service for measurement transducers from other manufacturers
For the calibration of torque measurement transducers from other manufacturers the same calibration procedures mentioned before are available. The technical details of the transducer, the application conditions and the permissible measurement uncertainty must be supplied so that our experts can determine both suitability and the correct procedure.
Please do not hesitate to contact our calibration laboratory should you have any further questions about the calibration of torque transducers from other manufacturers, we will be happy to help. (Email: cal-lab@deprag.de).

Calibration of Individual Devices

All components of a measurement chain can be calibrated independently from one another. Measurement devices for the piezo transducer can be tested, compared and adjusted using a charge calibrator and the same goes for measurement devices for the strain gauge transducer with a strain gauge calibrator.
The standards used, the DAkkS calibrations, are bound to the national standards of the Federal Agency for Physical Technology and therefore fulfil the highest quality requirements. The measurement transducers themselves are calibrated and documented in our own accredited calibration laboratory using standardised calibration procedures.

Factory calibration of EC screwdrivers and EC servo screwdrivers
The calibration value is acquired and/or checked and documented on a calibration certificate or stored inside the screwdriver.

Factory calibration of measurement tools / devices
The measurement screwdrivers for all motor sizes, controllers, measurement devices or measurement electronics are tested according to their function. The calibration value for the measurement cell is calculated simultaneously. The results are documented in a protocol, the so-called manufacturers test certificate.

Calibration service for Measurement chain

Alternatively to calibration of individual components, the entire measurement chain can also be calibrated together (EC or EC servo screwdriver and the corresponding screwdriving sequence controller ASTxx.
The calibration is then valid for that combination of screwdriver and controller. The calibration procedure provides a calibration protocol showing the results and proof of traceability.

The calibration is based on the currently valid standards, at this time DIN EN ISO/IEC 17025 (General requirements for the competence of testing and calibration laboratories).

Of course DEPRAG calibration and testing procedures fulfil all stated requirements. This is verified by numerous trading partners, such as certain well-known vehicle manufacturers.

Calibration Service

Mobile on-site Calibration

Our mobile measurement equipment allows us to calibrate your EC screwdrivers and the corresponding controllers in situ. Our DEPRAG specialists can bring the calibration station directly to your production line. This calibration procedure is very similar to the factory calibration at DEPRAG. Your screwdriving system is calibrated in accordance with DIN EN ISO 9001:2008. You then receive a calibration certificate with proof of traceability to national standards.

Advantages of an on-site calibration

- Tool downtime is minimised
- Save on transportation costs
- Products are calibrated by DEPRAG specialists
- Calibration station can be navigated through each production line
- Quality assurance for screw assembly
- Located worldwide: Our mobile calibration service is available in Germany, China, USA and Brazil

Power Analysis

With our freely programmable performance test station with a measurement range of up to 500 Nm and up to 12,000 rpm in four quadrant operation it is possible to carry out comprehensive analysis and selection of the suitable drive system in a very fast time for almost any application case up to 22 kW. As well as performance, speed and torque, there is also the option of measuring operating pressure and air consumption.
Every test object is individually moveable over three axes and the system can be set flexibly to suit the test object. Analysis is simple and takes a very short time.
We are able to utilize our Power Test-Station to test the most different types of air-operated tools and machines (air motors, electric motors, hydraulic drives, polishers, drills, etc.), which are either made by DEPRAG or other manufacturers.
According to a customer request, DEPRAG can determine characteristics in regards to torque or speed (torque / power output, speed / performance).

Torque Regulation

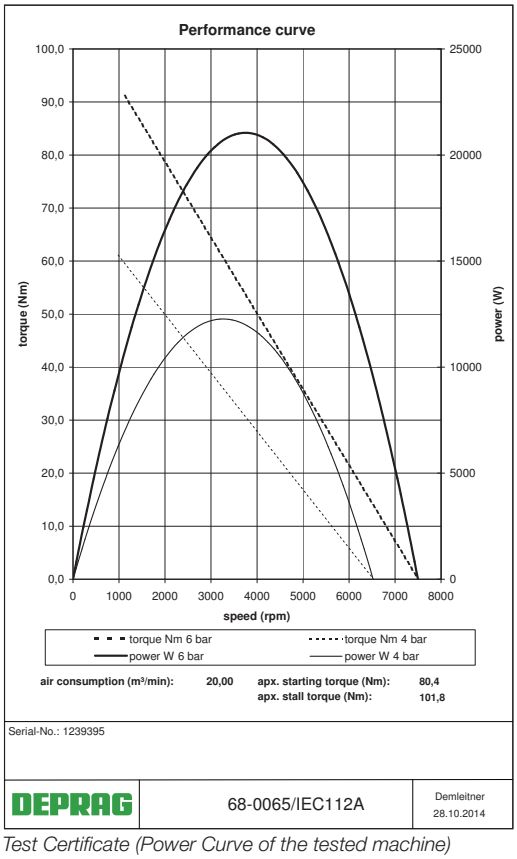
The characteristics are determined by regulating the torque. Starting with the torque M = 0 (corresponds to the no-load-speed of the tool to be examined), the torque can be gradually increased until maximum 500 Nm [4,425 inch pounds].

Speed Regulation

The characteristics are determined by regulating the speed. For each test process and in accordance with the specified requirements, the maximum speed, the minimum speed and the maximum torque can be defined accordingly.

To document this, a test certificate is produced showing the power curve of the tested machine.
The following technical data should be used as a guideline:
Equipment to be tested having a speed of: 0 - 12,000 rpm
Equipment to be tested having a torque of: 0.1 - 500 Nm
[0.8 - 4,425 inch pounds]
Right Angle Torque:
500 Nm / 4,425 inch pounds from 0 to 400 rpm
10 Nm at 12,000 rpm

If it is necessary to use special adapters or fixtures to achieve a viable test, those items can be offered by DEPRAG.



Test Certificate (Power Curve of the tested machine)

In-House Training offered by DEPRAG

To facilitate the seamless integration of our tools and machines at your facility, DEPRAG offers in-house training courses, which are held at non-specific intervals and which are intended to train maintenance and repair personnel.
Each training course consists of no more than 5 - 7 trainees plus one instructor. The course is hands-on on purpose. This allows each participant to put the verbal instructions into actual practice.

For further inquiries please contact your local DEPRAG representative.

WE OFFER THE FOLLOWING COURSE SUBJECTS:

- **Maintenance and Upkeep for Air-Operated Screwdrivers**
  1. Structural design of the various screwdriver types with practical exercises in disassembly and reassembly.
  2. Possible sources of interference and systematic detection with practical exercises.
  3. Torque range, torque setting, spring exchange, torque checking, and function test with practical exercises.
  4. Connection to the power network, flow pressure test, maintenance units and their settings with practical exercises.
  5. Torque repeatability, demonstration.
  6. Assembly aids: All special tools for assembly and disassembly are demonstrated in use and a list of these tools is handed out.

- **Maintenance and Upkeep for Screwfeeding Machines**
  1. DEPRAG screw feeding machines for handheld and stationary applications; structure, function, settings, maintenance and troubleshooting.
  2. Stationary screwdriving stations; function control, setting and maintenance.

- **User Training for EC- and EC-Servo Screwdriving Systems**
  1. Basic principles of the EC-servo screwdriving system
     - Structure of the screwdriver
     - Structure of the controller
     - Accessories
  2. Controller ASTxx - operation
  3. Presetting the software module control centre, screwdriving procedures, datalogger, statistics, graph depiction, loader
  4. Practical exercises in programming

- **Maintenance and Upkeep for Air Motors**
  1. Identification of the right air motor for your application
  2. Adjustment of air motors
  3. Installation of air motors
  4. Maintenance of air motors

Training

Our service technicians also train Machine Operators during on-site installation. Because of the thorough training and the technical know-how of the technicians, our customers achieve the highest installation efficiency.

Providing the best possible care during the entire installation process, is a must for DEPRAG.

Should you be interested, please let us know and we will send you a registration form and a training program with the exact dates. We will be glad to help with any hotel reservations.

Maintenance and Upkeep

Our products possess a high level of up-time and a long life span. Through timely service intervals, the maximum productivity with the least downtimes is achieved. Using a maintenance contract allows for customer-specific deadlines and dates to be taken into account already in advance.
Our service personnel is ready to support you with preventive maintenance and up-keep, as well as with refit- and software modifications, whenever you need it.

Every machine made by us is designed in such as way that your maintenance efforts are minimal and that you can produce your product process reliable and economical.
A regular, preventive maintenance is still the basis for an error-free operation. DEPRAG supplies around the world Specialists that offer a comprehensive support.
Our trained personnel performs required maintenance, installation- or rebuilding as well as testing directly on-site. With our individual service- and maintenance contracts, we consider all of your requirements and demands.
Should it however become necessary for an error to be resolved, then our carefully collected product- and processing documentation, as well as the fast availability of spare parts assure minimum repair times.

Service by Remote Access - we flexibly can adapt to your ideas

Our Service Technician logs into your machine, using a remote-access module (modem). This feature allows us to check machine data and system condition and to adjust, change or expand the existing software. If a malfunction occurs, we can determine the cause and change the program sequence.

The fast response provided by our Tele-Service reduces service-related expense, since in most cases it eliminates on-site service calls.

Hotline Service contract - Your direct link to our Service

According to individual consultation with our Service Manager Mr. Siegert,
Phone +49 (0) 9621 371 256.

Contact	www.deprag.com

DEPRAG

DEPRAG SCHULZ GMBH u. CO.
P.O. Box 1352, D-92203 Amberg, Germany
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