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ProFile Rotary File ISO 3630-1 Section 7.5 Stiffness Testing Final Report

KMT Report Number:	TR1114-001
Final Report Date:	1/18/2016
Revision Level:	Initial
Revision Date:	1/18/2016
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REVISION / REVIEW HISTORY

Revision Level	Revision / Review Date	Change	Approved by	Date Approved
Initial	1/16/2016	Initial release	NK	1/18/2016



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1 Subject

ProFile .04 Taper Rotary File, Size 20, 25mm, Part #: PIT042025

2 Objective

Perform ISO 3630-1 Section 7.5 Stiffness testing on the endodontic files.

3 Background

3.1 Job Summary

KMT Job Number:	1114RFE
Test Method/Protocol:	ISO 3630-1:2008(E) Section 7.5 Stiffness
Test Material Provided by:	Kowalski Heat Treating Company

Table 1: Job Summary

3.2 Testing Summary

Test Method	KMT Project Number	KMT Load Frame (s)	Test Start Date	Test Completion Date
ISO 3630-1 Section 7.5 Stiffness	1114RFE2971	LF16	1/15/2016	1/15/2016

Table 2: Testing Summary

4 Test Material

4.1 ISO 3630-1 Section 7.5 Stiffness Test Material

Description	Part Number	Lot Number	Quantity
PROFILE .04 Taper, Size 20, 25mm (Package A)	PIT042025	0000105683	3
PROFILE .04 Taper, Size 20, 25mm (Package B)	PIT042025	0000105683	3

Table 3: ISO 3630-1 Section 7.5 Stiffness Test Material

5 Equipment

5.1 Calibrated Test Equipment

Asset Tag	Description	Manufacturer	Serial #	Calibrated	Calibration Due
KMT ADT 06	Trans-Tek Angular Displacement Transducer, Model 0605-0001	Trans-Tek	E0018	4/6/2015	4/30/2016
KMT CNTR 09	Omega CSC32 Temperature Controller	Omega Engineering, Inc.	558577020195	12/31/2015	12/31/2016
KMT LC 52	Futek Model MBA500 - axial/torque; 100 lb, 100 inlb	Futek	561224	11/13/2015	11/30/2016
KMT MT 03	Mitutoyo Beveled Protractor	Mitutoyo	090051	12/31/2015	12/31/2016
KMT TP 7	Type K thermocouple probe TJ36-CASS-18U-6-OSTW-M	Omega Engineering, Inc.	KMTTP7	12/31/2015	12/31/2016

Table 4: Calibrated Test Equipment

5.2 Load Frames and Controllers

Asset Tag	Description	Manufacturer	Serial #
KMT LF 16	MTS Model 359.02 load frame, 25 kN capacity	MTS	1027931
KMT CTL 01	MTS Model 493.10 FlexTest GT Controller	MTS	02022807A

Table 5: Load Frames and Controllers

5.3 Fixturing

KMT ISO 3630 Fixture, 0.65" Lever Arm

Table 6: Fixturing

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