



INACTIVE FOR DESIGN AFTER 31 MAY 2013

NATIONAL AEROSPACE STANDARD

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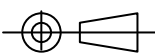
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FED. SUPPLY CLASS

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ISSUE DATE: APRIL 1966 REVISION DATE: MAY 31, 2013

THIRD ANGLE PROJECTION 	CUSTODIAN ENGINEERING MANAGEMENT COMMITTEE	REVISION 2
PROCUREMENT SPECIFICATION NONE	TITLE UNIFORM CUTTING TESTS - NAS SERIES METAL CUTTING EQUIPMENT SPECIFICATIONS	CLASSIFICATION SPECIFICATION NAS979 SHEET 1 OF 60

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FORM 09-01

**INACTIVE FOR DESIGN AFTER 31 MAY 2013
NATIONAL AEROSPACE STANDARD**

AEROSPACE INDUSTRIES ASSOCIATION OF AMERICA, INC., 1725 DE SALES STREET, N. W., WASHINGTON, D. C. 20036

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1.0 SCOPE

1.1 PURPOSE:

THIS SPECIFICATION PROVIDES A STANDARD FOR THE SELECTION OF CUTTING TESTS REQUIRED TO EVALUATE THE PERFORMANCE OF CONVENTIONAL AND NUMERICALLY CONTROLLED MACHINE TOOLS NOTED IN PARAGRAPH 1.2, EXCLUDING DRILLING AND TURNING MACHINES, AND TO PROVIDE A STANDARD FORMAT FOR RECORDING AND REPORTING ACTUAL PERFORMANCE RESULTS.

1.2 CLASSIFICATION:

THE MACHINES APPLICABLE TO THIS SPECIFICATION WILL BE CONSIDERED IN ONE OF THE FOLLOWING CATEGORIES:

1.2.1 MANUALLY CONTROLLED AND/OR TEMPLATE TRACING MACHINES, HIGH SPEED, LOW SPEED, OR FULL RANGE, INCLUDE THE FOLLOWING:

1.2.1.1 MILLING MACHINES - KNEE OR BED TYPE - HORIZONTAL AND VERTICAL SPINDLES.

1.2.1.2 MANUALLY OPERATED - HORIZONTAL AND VERTICAL BORING, DRILLING, AND MILLING MACHINES.

1.2.1.3 MILLING MACHINES - HORIZONTAL AND VERTICAL PROFILING AND CONTOURING.

1.2.2 NUMERICALLY CONTROLLED MACHINES, HIGH SPEED, LOW SPEED, OR FULL RANGE, INCLUDE THE FOLLOWING:

1.2.2.1 AUTOMATIC HORIZONTAL AND VERTICAL BORING, DRILLING, AND MILLING MACHINES.

1.2.2.2 MILLING MACHINES - NUMERICALLY CONTROLLED PROFILING, CONTOURING, AND STRAIGHT CUT.

1.2.2.3 MILLING MACHINES - MULTI-AXIS, TRAVELING GANTRY/TABLE.

LIST OF CURRENT SHEETS

NO.	REV	NO.	REV	NO.	REV	NO.	REV	NO.	REV	NO.	REV
1	1	11	1	21	1	31	1	41	NEW	51	NEW
2	1	12	1	22	1	32	1	42	NEW	52	NEW
3	1	13	1	23	1	33	1	43	NEW	53	NEW
4	1	14	1	24	1	34	1	44	NEW	54	NEW
5	1	15	1	25	1	35	1	45	NEW	55	NEW
6	1	16	1	26	1	36	1	46	NEW	56	NEW
7	1	17	1	27	1	37	1	47	NEW	57	NEW
8	1	18	1	28	1	38	1	48	NEW	58	NEW
9	1	19	1	29	1	39	1	49	NEW	59	NEW
10	1	20	1	30	1	40	NEW	50	NEW		

COMPLETELY REVISED ①

CUSTODIAN: MANUFACTURING COMMITTEE

PROCUREMENT SPECIFICATION

TITLE

UNIFORM CUTTING TESTS - NAS SERIES
METAL CUTTING EQUIPMENT SPECIFICATIONS

CLASSIFICATION SPECIFICATION

NAS 979

SHEET 1 OF 59

APPROVAL DATE APRIL 1966 REVISION ① 15 Jan. 1969

1.3 INTENDED USE:

THE CUTTING TESTS DESCRIBED BY THIS SPECIFICATION ARE INTENDED FOR USE IN EVALUATING MACHINES PROCURED FOR THE AEROSPACE MANUFACTURING INDUSTRY. AT TIME OF BID REQUEST, THE CUSTOMER SHALL SELECT AND SPECIFY APPLICABLE TESTS, OPTIONS, AND DEVIATIONS.

2.0 APPLICABLE SPECIFICATIONS

THE DETAILED REQUIREMENTS SELECTED FROM THIS SPECIFICATION SHALL BE AS DEFINED IN TABLE II OF NAS SPECIFICATIONS APPLICABLE TO THE MACHINES REFERRED TO IN SECTION 1.2.

3.0 REQUIREMENTS

3.1 THE MANUFACTURER SHALL BE CONTRACTUALLY OBLIGATED TO PERFORM AND EVALUATE THE CUTTING TESTS SPECIFIED BY THE CUSTOMER PER DETAILS AND DESCRIPTIVE DRAWINGS. THESE TESTS SHALL BE USED TO EVALUATE THE FUNCTIONAL ACCURACY AND DYNAMIC RESPONSE OF THE MACHINE UNDER ACTUAL CUTTING CONDITIONS TO THE REQUIRED DIMENSIONS AND TOLERANCES AS SPECIFIED ON THE TEST SHEETS.

3.2 ALL INSPECTION SHEETS, LISTING THE TEST RESULTS, CERTIFIED BY AUTHORIZED PERSONNEL, SHALL BE PRESENTED TO THE CUSTOMER TO DETERMINE THE ACCEPTANCE OF THE MACHINE FOR SHIPMENT.

3.2.1 DATA ON THE INSPECTION SHEET SHALL BE WRITTEN IN THE SAME FORM AS PRESENTED IN THE TEST DETAIL SECTION 4.3.

4.0 INSPECTION AND ACCEPTANCE

4.1 CLASSIFICATION OF TESTS:

EACH MACHINE SHALL BE SUBJECTED TO THE CUTTING TESTS SELECTED BY THE CUSTOMER IN ORDER TO ESTABLISH COMPLIANCE WITH THIS SPECIFICATION. DEVIATIONS MUST HAVE CUSTOMER APPROVAL PRIOR TO ACCEPTANCE TESTING.

4.2 TEST CONDITIONS:

EACH MACHINE SHALL BE TESTED UNDER THE FOLLOWING CONDITIONS UNLESS APPROVED DEVIATION IS OBTAINED FROM THE CUSTOMER.

4.2.1 AT MANUFACTURER'S PLANT BY MANUFACTURER WITH VERIFIED AND CERTIFIED TEST RESULTS FURNISHED TO CUSTOMER.

4.2.2 AT MANUFACTURER'S PLANT, ACCOMPLISHED BY THE MANUFACTURER AND WITNESSED BY THE CUSTOMER.

4.2.3 AT CUSTOMER'S PLANT, OR DESIGNATED POINT OF INSTALLATION, AS SPECIFIED BY THE CUSTOMER.

4.2.4 MEASURING EQUIPMENT, HAVING EVIDENCE OF CALIBRATION TRACEABLE TO THE NATIONAL BUREAU OF STANDARDS, WHICH IS ACCEPTABLE TO THE CUSTOMER SUCH AS OPTICAL, ELECTRONIC OR AIR GAUGING MUST BE USED TO VALIDATE RESULTS. MANUFACTURER TO FURNISH CHECKOUT EQUIPMENT FOR TESTS CONDUCTED AT THE MANUFACTURER'S PLANT. CUSTOMER TO FURNISH CHECKOUT EQUIPMENT FOR TESTS CONDUCTED AT THE CUSTOMER'S PLANT.

COMPLETELY REVISED (1)

NAS 979
SHEET 2

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