

Industrial Maintenance Technology: Blueprint Reading for Machinists

Practice and perform safe shop procedures at all times. **BRM1**

1 Practice and perform safe shop procedures at all times. **BRM1**

Apply the technical math required for employment opportunities in maintenance. **BRM2**

2 Apply the technical math required for employment opportunities in maintenance. **BRM2**

Perform all duties with emphasis on **BRM3**

a integrity **BRM3A**

b responsibility **BRM3B**

c quality **BRM3C**

d discipline **BRM3D**

e teamwork **BRM3E**

Demonstrate competency in mathematical fraction and decimal problems. **BRM4**

4 Demonstrate competency in mathematical fraction and decimal problems. **BRM4**

Identify the alphabet of lines. **BRM5**

5 Identify the alphabet of lines. **BRM5**

Identify multiple views. **BRM6**

6 Identify multiple views. **BRM6**

Arrange multiple views. **BRM7**

7 Arrange multiple views. **BRM7**

Arrange two-view drawings. BRM8

8 Arrange two-view drawings. BRM8

Identify one-view drawings. BRM9

9 Identify one-view drawings. BRM9

Arrange and identify auxiliary views. BRM10

10 Arrange and identify auxiliary views. BRM10

Demonstrate the use of size and location dimensions. BRM11

11 Demonstrate the use of size and location dimensions. BRM11

Demonstrate proper dimensions of cylinders and arcs. BRM12

12 Demonstrate proper dimensions of cylinders and arcs. BRM12

Size dimensions of holes and angles. BRM13

13 Size dimensions of holes and angles. BRM13

Locate dimensions for centering of holes, points, and centers. BRM14

14 Locate dimensions for centering of holes, points, and centers. BRM14

Interpret the base line dimensions on drawings. BRM15

15 Interpret the base line dimensions on drawings. BRM15

Calculate tolerances. BRM16

16 Calculate tolerances. BRM16

Identify labeling of various screw threads. BRM17

17 Identify labeling of various screw threads. BRM17

Calculate tapers and machined surfaces. BRM18

18 Calculate tapers and machined surfaces. BRM18

Dimension parts using shop notes. BRM19

19 Dimension parts using shop notes. BRM19

Identify half, full, and removed sections. BRM20

20 Identify half, full, and removed sections. BRM20

Interpret ordinate and tabular dimensions. BRM21

21 Interpret ordinate and tabular dimensions. BRM21

Set tolerances using geometric dimensioning techniques. BRM22

22 Set tolerances using geometric dimensioning techniques. BRM22

Sketch parts with irregular shapes. BRM23

23 Sketch parts with irregular shapes. BRM23

Sketch oblique views of various parts. BRM24

24 Sketch oblique views of various parts. BRM24

Sketch and dimension shop drawings. BRM25

25 Sketch and dimension shop drawings. BRM25

Demonstrate visualizing techniques of multiple views. BRM26

26 Demonstrate visualizing techniques of multiple views. BRM26

Identify line types used in combinations. BRM27

27 Identify line types used in combinations. BRM27

Identify standards listings on working drawings. BRM28

28 Identify standards listings on working drawings. BRM28

List procedural machining and construction requirements from notations on working drawings. BRM29

29 List procedural machining and construction requirements from notations on working drawings. BRM29

List proper procedure for construction of various machining processes. BRM30

30 List proper procedure for construction of various machining processes. BRM30

Determine proper thread series and types for duty specific assembly. BRM31

31 Determine proper thread series and types for duty specific assembly. BRM31

Specify duty specific uses of contour notes. BRM32

32 Specify duty specific uses of contour notes. BRM32

Determine overall measurements of contoured parts. BRM33

33 Determine overall measurements of contoured parts. BRM33

Explain various terms involved in multiple sections. BRM34

34 Explain various terms involved in multiple sections. BRM34

Identify usages for chamfers and interpret sizes. BRM35

35 Identify usages for chamfers and interpret sizes. BRM35

Define various chamfer terms. BRM36

36 Define various chamfer terms. BRM36

Determine the sizing procedures of necks and grooves. BRM37

37 Determine the sizing procedures of necks and grooves. BRM37

Identify various keyway and key seat standards. BRM38

38 Identify various keyway and key seat standards. BRM38

Identify usage of geometric symbols. BRM39

39 Identify usage of geometric symbols. BRM39

Define terms relating to geometric tolerancing. BRM40

40 Define terms relating to geometric tolerancing. BRM40

Set standards and tolerances using geometric dimensioning BRM41

41 Set standards and tolerances using geometric dimensioning BRM41

Set axis coordinates on numerical control prints. BRM42

42 Set axis coordinates on numerical control prints. BRM42

Determine axis coordinates on ordinate

43 Determine axis coordinates on ordinate and tabular prints. BRM43

**and tabular
prints. BRM43**

**Identify casting and
forging terms. BRM44**

44 Identify casting and forging terms. BRM44

**Calculate bend setbacks
in sheet metals and
plate steels. BRM45**

45 Calculate bend setbacks in sheet metals and plate steels. BRM45

**Identify parts and
materials from various
reference books and
manuals. BRM46**

46 Identify parts and materials from various reference books and manuals. BRM46