

Red Seal Occupational Standard - 2017

A – Performs Common Occupational Skills

Task A-1 Performs safety-related functions.	A-1.01 Uses personal protective equipment (PPE) and safety equipment.	A-1.02 Maintains safe worksite.	A-1.03 Protects the environment.	A-1.04 Performs lock-out/tag-out and zero-energy state procedures.		
Task A-2 Uses tools and equipment.	A-2.01 Uses hand and portable power tools.	A-2.02 Uses shop machines.	A-2.03 Uses access equipment.			
Task A-3 Performs routine trade tasks.	A-3.01 Plans work.	A-3.02 Fabricates work piece.	A-3.03 Lubricates systems and components.	A-3.04 Performs leveling of components and systems.	A-3.05 Uses fastening and retaining devices.	A-3.06 Performs material identification.
	A-3.07 Performs heat treatment of metal.	A-3.08 Uses mechanical drawings and schematics.				
Task A-4 Uses communication and mentoring techniques.	A-4.01 Uses communication techniques.	A-4.02 Uses mentoring techniques.				
Task A-5 Performs measuring and layout.	A-5.01 Prepares work area, tools and materials.	A-5.02 Measures material and components.	A-5.03 Lays out components.	A-5.04 Maintains precision measuring and layout tools.		
Task A-6 Performs cutting and welding operations.	A-6.01 Cuts material with oxy-fuel and plasma arc equipment.	A-6.02 Joins material using oxy-fuel welding equipment.	A-6.03 Welds material using shielded metal arc welding (SMAW) equipment.	A-6.04 Welds material with gas metal arc welding (GMAW) equipment.	A-6.05 Welds material with gas tungsten arc welding (GTAW) equipment (NOT COMMON CORE).	A-6.06 Maintains welding equipment.

B – Performs Rigging, Hoisting/Lifting and Moving

Task B-7 Plans rigging, hoisting/lifting and moving.	B-7.01 Determines load.	B-7.02 Selects rigging equipment.	B-7.03 Selects hoisting/lifting and moving equipment.	B-7.04 Secures area.
Task B-8 Rigs, hoists/lifts and moves load.	B-8.01 Sets up rigging, hoisting/lifting and moving equipment.	B-8.02 Performs hoist/lift and move.	B-8.03 Maintains rigging, hoisting/lifting and moving equipment.	

C – Services Mechanical Power Transmission Components and Systems

Task C-9 Services prime movers.	C-9.01 Installs prime movers.	C-9.02 Diagnoses prime movers.	C-9.03 Maintains prime movers.	C-9.04 Repairs prime movers.
Task C-10 Services shafts, bearings and seals.	C-10.01 Diagnoses shafts, bearings and seals.	C-10.02 Maintains luminaires.	C-10.03 Maintains shafts, bearings and seals.	C-10.04 Repairs shafts, bearings and seals.
Task C-11 Services couplings, clutches and brakes.	C-11.01 Installs couplings, clutches and brakes.	C-11.02 Diagnoses couplings, clutches and brakes.	C-11.03 Maintains couplings, clutches and brakes.	C-11.04 Repairs couplings, clutches and brakes.
Task C-12 Services chain and belt drive systems.	C-12.01 Installs chain and belt drive systems.	C-12.02 Diagnoses chain and belt drive systems.	C-12.03 Maintains chain and belt drive systems.	C-12.04 Repairs chain and belt drive systems.
Task C-13 Services gear systems.	C-13.01 Installs gear systems.	C-13.02 Diagnoses gear systems.	C-13.03 Maintains gear systems.	C-13.04 Repairs gear systems.
Task C-14 Performs shaft alignment procedures.	C-14.01 Performs rough alignment.	C-14.02 Performs dial alignment.	C-14.03 Performs laser alignment.	

D – Services Material Handling/Process Systems

Task D-15 Services robotics and automated equipment.	D-15.01 Installs robotics and automated equipment.	D-15.02 Diagnoses robotics and automated equipment.	D-15.03 Maintains robotics and automated equipment.	D-15.04 Repairs robotics and automated equipment.		
Task D-16 Services fans and blowers.	D-16.01 Installs fans and blowers.	D-16.02 Diagnoses fans and blowers.	D-16.03 Maintains fans and blowers.	D-16.04 Repairs fans and blowers.		
Task D-17 Services pumps.	D-17.01 Installs pumps.	D-17.02 Diagnoses pumps.	D-17.03 Maintains pumps.	D-17.04 Repairs pumps.		
Task D-18 Services compressors.	D-18.01 Installs compressors.	D-18.02 Diagnoses compressors.	D-18.03 Maintains compressors.	D-18.04 Repairs compressors.		
Task D-19 Services process piping, tanks and containers.	D-19.01 Installs process tanks and containers.	D-19.02 Installs process piping.	D-19.03 Diagnoses process tanks and containers.	D-19.04 Diagnoses process piping.	D-19.05 Maintains process tanks and containers.	D-19.06 Maintains process piping.
	D-19.07 Repairs process tanks and containers.	D-19.08 Repairs process piping.				
Task D-20 Services conveying systems.	D-20.01 Installs conveying systems.	D-20.02 Diagnoses conveying systems.	D-20.03 Maintains conveying systems.	D-20.04 Repairs conveying systems.		

E – Services Fluid Power Systems

Task E-21 Services hydraulic systems.	E-21.01 Installs hydraulic systems.	E-21.02 Diagnoses hydraulic systems.	E-21.03 Maintains hydraulic systems.	E-21.04 Repairs hydraulic systems.
Task E-22 Services pneumatic and vacuum systems.	E-22.01 Installs pneumatic and vacuum systems.	E-22.02 Diagnoses pneumatic and vacuum systems.	E-22.03 Maintains pneumatic and vacuum systems.	E-22.04 Repairs pneumatic and vacuum systems.

F – Performs Preventative and Predictive Maintenance, Commissioning and Decommissioning

Task F-23 Performs preventative and predictive maintenance.	F-23.01 Performs preventative maintenance activities.	F-23.02 Performs vibration analysis procedures.	F-23.03 Performs balancing procedures.	F-23.04 Performs non-destructive testing (NDT) procedures.	F-23.05 Performs fluid analysis procedures.	F-23.06 Performs predictive maintenance activities.
Task F-24 Commissions and decommissions equipment.	F-24.01 Commissions systems and components.	F-24.02 Decommissions systems and components.				