

Proceco TYPHOON® HD 30-Point Checklist

The PROCECO TYPHOON® HD was originally designed and built by the founders of PROCECO. Ingersol Rand took delivery of the first swing-out turntable washer in 1973. Soon after that, the design was patented under US D-271-146.

Today, the PROCECO TYPHOON® HD is a high-end, robust turntable power spray washer designed to out-perform and out-last any other turntable washer on the market. Through the deployment of sound engineering concepts and quality machine building, PROCECO has incorporated over 30 distinctive features into the TYPHOON® HD to make sure it meets our customer's most demanding needs.

See for yourself

1. **Manufacturing Standards** adhere to PROCECO specifications with an ISO 9001:2000 certified quality system.
2. **Heavy Duty (HD) Construction**, and as a rule, the TYPHOON® HD generally has 25-50% more mass than our competitors' machines. Simply because, as an engineering driven company, we believe that there can be no compromise to operator safety, process reliability, quiet machine operation and extended service life. The TYPHOON® HD is designed with a minimum 4:1 safety factor, extra large tanks and heavy-duty components.
3. **Tank and Cabinet** form one integral all-welded assembly constructed with ASTM A36 3/16" carbon steel plate, suitably reinforced with integrated bends and structural shapes.
 - Heavy plate construction guarantees structural integrity under load without distortion or misalignment. Large mass of assembly offers quiet operation.
 - Large solution tank volume reduces the likelihood of foaming due to reduced agitation by pumping action and helps to settle contamination. Extensive applications expertise has confirmed that a minimum ratio of 2:1 is required between tank capacity and pump flow rate per minute.
4. **Turntable** mounted on a swing out cabinet door for easy loading from front or overhead. Unique hexagonal design is all welded construction with minimum 3/8" structural members.
 - Turntable is rated assuming a full load is placed at midway on the radius and a factor of safety of 4:1 is used in sizing the support structure.
 - Turntable rotates on heavy-duty, lubricated-for-life bearings rated for 50,000 hours.
5. **Turntable Drive** assures positive rotation even with eccentric loads while permitting slippage if fallen parts obstruct the free rotation. Heavy-duty design is fully adjustable and uses readily available OEM components including a SEW gear drive and heavy-duty chrome plated roller chain, not bicycle chain.

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6. **Swing-out Door** is minimum 4" deep U-shaped construction for maximum rigidity and water tightness, welded to a heavy-duty hollow structural tube pivot. Pivot shafts are minimum 2-1/2" diameter and rotate on self-aligning heavy-duty flange block bearings.
7. **Integral Turntable Drip Tray** keeps floor dry and safe by returning dripping solution to the tanks.
8. **Maintenance-Free Door Seals** uses double-steel labyrinth to trap spray and steam inside cabinet eliminating the need for replacement of seals.
9. **Exterior Surfaces** are covered with thermal/acoustic insulation; minimum R =7.2 polyurethane foil backed thermal insulation and 18 GA galvanized steel sheathing for quiet (80dBa or less) operation.
10. **Floor in Spray Cabinet** allows for safe loading and maintenance and acts as an efficient thermal barrier to solution tanks.
11. **Easy-Access Screens** are corrosion resistant stainless steel mesh and trap any debris that may plug nozzles.
12. **Welds** are visually inspected and tested for leaks in conformance to CWB standards and PROCECO's ISO 9001 quality policy. Tank is welded inside and out using MIG flux core wire conforming to AWS A5.20 standards. All welds are 3/16" full penetration fillet welds.
13. **Door Safety Latch** securely holds door in closed position and prevents accidental locking of door.
14. **Door Open Latch** securely holds door in open position for loading.
15. **Tank Covers** are tight fitting so that airspace below covers provides efficient insulation against heat losses. Filter screen covers are hinged for periodic inspection and removable for full tank maintenance. All cover plates have welded handles and are designed for safe lifting.
16. **Circulation Pumps** are PROCECO low NPSH vertical process type with no contact seal for maintenance free operation. PROCECO's exclusive submerged wet-end single-stage centrifugal designs deliver continuous high performance without cavitation or pump-related foaming for solution temperature up to 195°F.
 - All shaft bearings are located above tank top, safely removed from heat and steam of cleaning solutions for long life
 - The tapered cantilevered shaft is made of high-tensile steel and is oversized to eliminate flexing and vibration.
 - Pumps are specifically designed around the best efficiency point required for the harsh operating environment in power washing.

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- Pump and motor are removable for servicing without draining the tanks.
 - Available in standard (60-70psi) or high (140-200psi) pressure configurations. For pump selection, refer to our Process Pump Recommendations.
17. **External Solution Piping** is all welded and flanged as per ASME B31.1 pressure piping code.
 18. **Spray Manifolds** equipped with non-intersecting high-velocity V-Jet nozzles and are hydro-dynamically designed and universally adjustable. High-impact spray is from top, bottom and sides. Filter screens installed upstream of the pump trap debris that may clog the nozzles for maintenance free operation.
 19. **Solution Level Controls** for make-up and low-level cutoff use large 5-1/2" stainless-steel float ball and electromechanical float switch for failsafe operation.
 20. **Electrical Solution Heating** uses incoloy sheathed screw plug type electric immersion heaters with a minimum watt density of 50 W/in² to prevent premature burnout in scaling conditions.

Gas Solution Heating as an option uses a forced air gas burner firing into an immersion tube; complete with safety controls and low-level cutoff switch. All burners are AGA / CGA approved and PROCECO will supply electric and gas schematics required for installation and approval from local utilities.
 21. Electrical Wiring and Controls exceed ANSI/NFPA 79, NEC 70 industrial electrical codes utilizing only CSA / UL approved components.
 22. Yellow **Safety Guarding** on all moving parts.
 23. **Exterior Finish** is cleaned and coated using an iron phosphate treatment followed by a 3 mil, 2 component chemical resistant epoxy coating.
 24. **Testing and Inspection** are the most important part of our ISO 9001-2000 certified quality system. Each system is tested, passed through a full operational run-off and inspected prior to shipping. Customers are invited to attend every run-off where they may see our quality system in operation.
 25. PROCECO backs every parts washer with a one (1) **Year Warranty**.
 26. Each system comes with two complete **Instruction Manuals** with detailed installation, start-up, operation, troubleshooting and maintenance instructions. These also include lists of recommended replacement parts, drawings, diagrams, and supplier bulletins. Also included is a CDROM containing the manual in PDF format and all available third-party supplier bulletins.
 27. Every order is assigned to a **Project Management** team to ensure on-time delivery and should the need arise, that we understand your changing requirements.

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28. Over **60 Pre-Engineered Options** to choose from allowing you to fully customize your parts washer to meet your specific requirement.
29. PROCECO has **Sales and Service** locations throughout the United States, Canada and Mexico.
30. **Cleaning Tests** can be performed in our full service lab to give you piece-of-mind prior to making your buying decision.

