

B-TEK Scales, LLC fabricates custom 60' x 11' replacement truck scale from 316L stainless steel

A White paper illustrating B-TEK Scales, LLC ability to create custom scale solutions for various industries

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B-TEK Scales, LLC. was presented with a unique and challenging replacement truck scale opportunity. B-TEK's Tampa, FL based distribution partner, Controls and Weighing Systems (C&WS), requested a replacement truck scale fabricated entirely from materials that could withstand harsh phosphoric acid. The request came from a long time client who had replaced their load-out scale three times in the last fifteen years due to the corrosive properties of the acid. 316L stainless steel was chosen based on its high corrosion resistance to salts, acids and dyes. It's very uncommon to construct a truck scale from stainless steel. Making the scale even more challenging was the fact that it had to fit the existing concrete foundation. The 60' long scale had to have four modules, match existing pier locations and 13" end-wall height. B-TEK's engineering team also faced a significant design obstacle



Figure 2 of scale end sections

due to limited availability of structural components made of 316L stainless steel. The B-TEK engineering team designed the custom weighbridge modules incorporating specially fabricated I-beams sourced from a supplier in Europe. Every scale part and fastener normally made from carbon steel had to be supplied in



Figure 1 of fabricating the scale



Figure 3 finished scale & fabricators

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316L stainless. The scale was completely assembled on the factory floor to ensure field installation would go smoothly. C&WS client required minimum down-time during the scale retrofit. The existing deteriorated carbon steel scale was removed and the new one was installed, calibrated and placed into service in a single day. The production down-time was less than 10 hours for the 24 / 7 operation. C&WS technicians and installation crew are truly the best in the scale business.



Figure 6 of new scale installation



Figure 4 of existing scale condition

Controls & Weighing Systems has provided scale sales and service throughout Florida for 38 years. B-TEK Scales has over a combined 95 years of scale experience to offer in support of your weighing equipment needs. B-TEK is your first choice in scale solutions. For more information on this or other B-TEK projects, please contact us at 1-800-266-8900.



Figure 5 of new scales ready to install



Figure 7 of new scale installed