



High-hardness duplex stainless steel adopted for wainscoting at a pharmaceutical plant

Creating a robust plant environment that withstands hard daily use.

Responding to the customer's request for a material harder than SUS304, we leveraged material properties and overcame the challenges of drawing analysis to bring the wainscoting to life. We supported the fabrication of wainscoting for a new construction and renovation project at a pharmaceutical plant. This case study shows how SEIKOH solved a challenge unique to plant environments, where carts used to carry chemicals frequently move through hallways and work areas, with precise material recommendations and persistent engineering.

SEIKOH's Solutions

◆Selecting a material beyond conventional "SUS304" based on a customer consultation

Initially, SUS304, a common stainless steel, was considered as the material for wainscoting. However, inside the plant, the customer faced the issue of carts carrying chemicals inevitably colliding with the walls, making the surfaces prone to scratches. "We need a material harder than SUS304." In response to this urgent request, we proposed duplex stainless steel, which offers superior hardness. Its outstanding hardness and wear resistance were highly evaluated, leading to its formal adoption.

◆The challenge of architectural drawings: a particularly difficult material takeoff

After the material was selected, we faced another major hurdle. The drawings provided by the general contractor were architectural drawings, not manufacturing drawings.

To actually cut the necessary components in the metalworking process, we had to perform a material takeoff from these architectural drawings, accurately determining the required sizes and quantities of each component. Because we were not accustomed to working with architectural drawings, it was particularly difficult to interpret the structure piece by piece and recalculate the dimensions. However, we did not compromise and carried out a detailed analysis to ensure a smooth handoff to production.

◆Supporting the customer's challenges from the early stages of design

SEIKOH's work is not limited to simply cutting metal according to finalized drawings. We begin with dialogue about which material is most suitable, and even when working with drawings in a different format, we carefully examine every possible approach to bring the design to life. To help preserve the long-term beauty and functionality of our customers' plants, we will continue to provide support that goes one step further.

