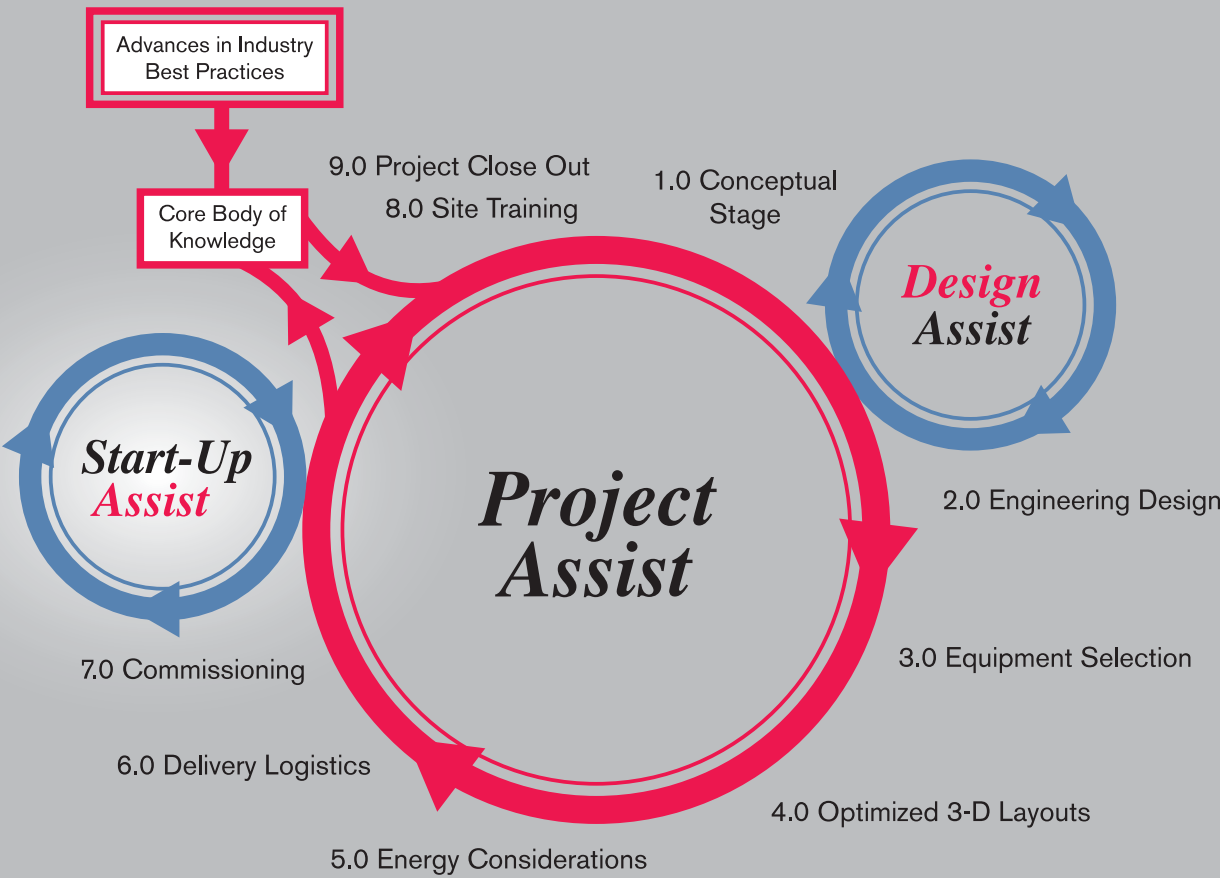


# ARMSTRONG



## Start-Up Assist

FILE NO:	81.14
DATE:	April 1, 2008
SUPERSEDES:	New
DATE:	New

**7.0 Monitoring and Maintenance**

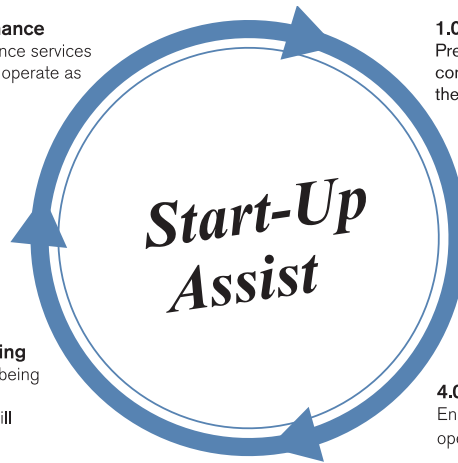
Technical support and maintenance services ensure that your installation will operate as per Armstrong's commitments

**6.0 Site Training**

Armstrong can provide training to on site staff. This leads to reduced life cycle costs and overall client satisfaction with the project.

**5.0 Commissioning Reporting**

Confidence that the equipment being turned over is operating per manufacturer's standards and will provide reliable performance.

**1.0 Installation Review and Advisory**

Preconstruction with installer to address any concerns around the installation of the equipment.

**2.0 Flushing Regime**

Advance review of proper flushing during installation leads to reduced long-term maintenance costs.

**3.0 Pre-commissioning**

Will minimize lost time in commissioning leading to reduced costs and faster equipment availability.

**4.0 Commissioning**

Ensures smooth transition to full operating status with minimal disruptions.

Armstrong's **Design Assist**, **Project Assist** and **Start-up Assist** Services are designed to minimize the risk experienced by owners, developers, contractors and consultants.

Armstrong's Start-up Assist Service consists of a consultation with the designated contractor responsible for installation and commissioning of the equipment. These consultations are designed to minimize the risk of premature equipment failure due to improper operation of equipment such as improper system cleansing, rotation and pipe hook up.

In conjunction with an integrated system, Start-Up Assist can significantly reduce commissioning costs to the developer. Plants are typically partially pre-commissioned at the factory and systems can be set to reduce the number of system balancing iterations, thus reducing cost and on-site manpower.

**► Benefits**

- Advances the project schedule.
- Improves handover satisfaction.
- Reduces call backs.
- Prevents damage to equipment during flushing.
- Reduces commissioning costs through pre-setting.
- Enhances system performance.
- Provides standby service to replace damaged equipment.
- Performance monitoring.
- Extended warranty on equipment.
- Full technical organizational capability and support.
- Recorded start up reports including product ID.

**► START-UP ASSIST Documents**

- Commissioning Request Form
- Pre-Commissioning Checklist
- Flush Regime Checklist
- Start-Up Commissioning Plans
- Commissioning Report
- Start-Up Process Life Cycle
- Detailed Method Statements
- Risk Assessments Offering
- Maintenance Contracts
- Life Cycle Contracts

**► The Start-Up Assist Project Hand-Over Procedure**

- Servicing of all Equipment
- Re-Building of Equipment on site
- IPP Monitoring
- HVAC Commissioning
- MBS Commissioning
- Performance Checking where Applicable
- Installations Review and Advisory
- Retro-fit Installations

By providing robust tools and disciplined, experienced project management, Armstrong will partner with you to reduce risk, minimize waste, and increase your profitability. For more information on START-UP ASSIST, please contact your Armstrong representative.

EXPERIENCE BUILDING...

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