

## CASE STUDY

### How Carlyle Creates Value

Deep industry expertise. Global scale and presence. Extensive network of Operating Executives. And a wealth of investment portfolio data; we call it The Carlyle Edge. These are the four pillars of Carlyle's value creation model. By leveraging these core capabilities and resources—Carlyle has established a 30-year overall track record of investing in companies, working to make them better and serving our investors' needs.



#### About Marle and the Transaction

Marle International SA is the largest independent orthopedic contract manufacturer in Europe and one of the largest manufacturers of hip implants in the world. Marle produced nearly one million orthopedic implant components in 2016.

The company is a strategic partner for major orthopedic implant vendors worldwide. It serves major corporations such as Johnson & Johnson, Smith & Nephew and Zimmer Biomet, as well as emerging or regional players such as Amplitude, Arthrex, Exactech, Lima Corporate, Mathys, Medacta, Microport and Wright Tornier. Marle has significant know-how in precision forging and casting, accumulated across its 38-year history.

Carlyle acquired Marle in July 2009 from its founder, Bernard Marle and completed the sale to IK Investment Partners in June 2016.

#### Key Achievements Since Carlyle's Investment in 2009

Before Carlyle's investment, Marle had all the characteristics of a primary LBO candidate: family-owned business with a relatively limited management team, optimization potential across most business areas, a limited strategic focus and a lack of international reach.

The Marle leveraged management buyout is a showcase of a highly successful PE-backed transaction, with an outstanding industrial outcome and significant value actively created by the shareholders for all parties through the following drivers:

### AT A GLANCE

#### Marle International SA

**Industry:** Healthcare

**Region/Country:** Nogent, France

**Fund:** Carlyle Europe Technology Partners II

**Acquired:** July 2009

**Status:** Exited

During Carlyle's investment period, Marle saw a **151% increase in revenue** and a **149% increase in EBITDA**.

#### ABOUT THE CARLYLE GROUP

The Carlyle Group (NASDAQ: CG) is a global investment firm with deep industry expertise that deploys private capital across four business segments: Corporate Private Equity, Real Assets, Global Credit and Investment Solutions. With \$216 billion of assets under management, Carlyle's purpose is to invest wisely and create value on behalf of our investors, portfolio companies and the communities in which we live and invest. Carlyle employs 1,625 people in 31 offices across six continents.

Set forth herein is a selected case study that Carlyle believes illustrate its ability to create value at, and improve the performance of, its portfolio companies. The performance of these portfolio companies is not necessarily indicative of the performance of all of Carlyle's portfolio companies. The information provided herein is for informational purposes only and is not and may not be relied on in any manner as advice or as an offer to sell or a solicitation of an offer to buy interests (the "Interests") in any fund or other product sponsored or managed by T.C. Group, L.L.C. or any of its affiliates (together, "Carlyle"). Any such offer or solicitation shall only be made pursuant to a final confidential private placement memorandum (as amended and/or restated from time to time) and the applicable fund's subscription documents, which will be furnished to qualified investors on a confidential basis at their request for their consideration in connection with such offering.

#### **Transition from a family-owned patriarchal organization to a fully-fledged corporate organization and management team**

With Carlyle's investment and support, the finance function—previously led by the founder's spouse—was significantly reinforced. A solid enterprise resource planning system was deployed, together with the implementation of a quality management organization from scratch, earning ISO 13485 certification and passing FDA audits. Under Carlyle's ownership, every senior management position in the organization was upgraded or added.

#### **Creation of Europe's number one player in its sector and the world's number three, tripling the size of the company over seven years**

Historically, Marle had been focused on forged titanium stems for hip implants, mostly addressing French and Swiss orthopedic original equipment manufacturers. With Carlyle's support, Marle progressively extended its product range to cover hip, knee, spine, shoulder and ankle implants, as well as instrumentation (mainly rasps and handles) and also broadened its industrial capabilities to implement a "one-stop-shop" industrial strategy, which enabled the company to offer finished product to its customers.

To complete this transformation from niche forging specialist to end-to-end player mastering every process step for the manufacturing of every type of implant, the group had to complete four add-on acquisitions of complementary businesses (casting, machining, polishing, 3D printing) and undertook major capital investments (two brand new sites for plastics machining, and finishing & plasma-coating) representing a total investment of close to €70 million.

Offering a complete industrial solution also enabled the company to compete internationally. As of Q4 2015, export sales accounted for more than 75% of revenues with customers in new markets, including the U.S., Russia, Japan, China, Korea, Brazil and the UK.

#### **Key Performance Metrics During Carlyle's Ownership**

During Carlyle's investment period, revenue and EBITDA increased by 151% and 149% respectively. This strong performance was driven both by organic and external growth, with the acquisition and integration of four industrial sites.