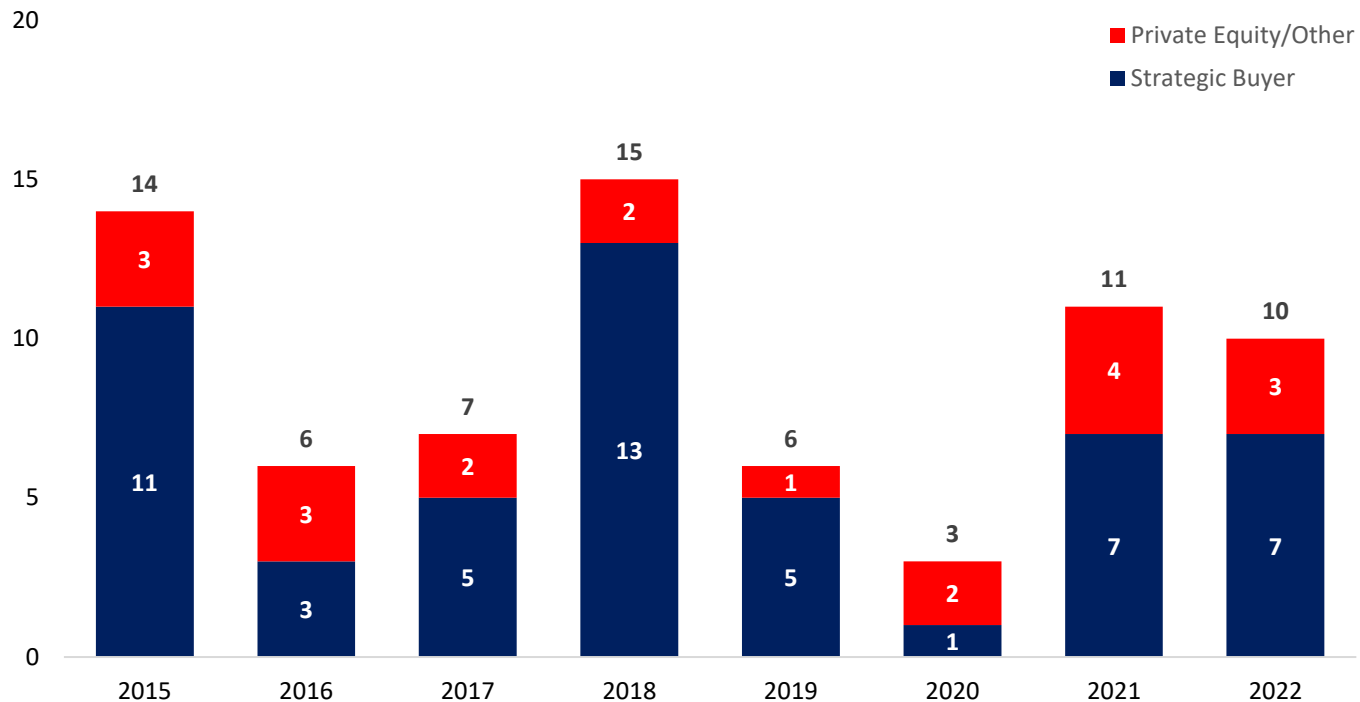


Mill-Related Transactions by Year and Buyer Type

Strategic buyers have driven the majority of paper and pulp mill M&A activity

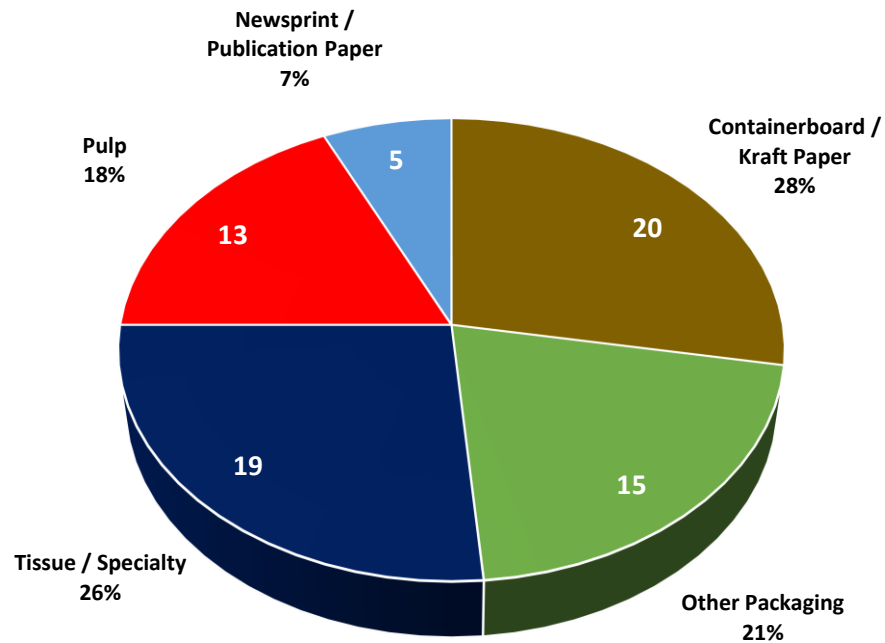
North American Paper & Pulp Mill Transactions by Buyer Type, 2015 - 2022



Mill-Related Transactions by Sector

Packaging grades represent nearly half of the 72 mill-related transactions from 2015 through 2022









North American Paper & Pulp Mill Transactions by Sector, 2015 - 2022



Note: Categorizes conversion transactions based on the planned conversion grade. Categorizes Paper Excellence acquisition of Domtar and Resolute as pulp transactions. Domtar has equal capacity in publication paper and pulp, but the acquirer, Paper Excellence, is primarily a pulp producer. Resolute had larger publication papers capacity than pulp, but equivalent profitability in the two grades since 2019. Categorizes Blackstone acquisition of Sustana as pulp as these grades constitute 61% of capacity; Sustana also produces specialty and publication papers


2022 Mill Transactions

2022 featured 10 sector transactions primarily in packaging, specialty papers, pulp and tissue. The two largest transactions were Paper Excellence's acquisition of Resolute Forest Products and the SWM / Neenah merger that formed Mativ

Acquiror	Target	Announced	Target / Transaction Description
		Dec. 2022	<ul style="list-style-type: none"> Von Drehle produces tissue paper at mills in Cordova, NC and Natchez, MS with total capacity of 94,000 tons of parent rolls. The Company also has three tissue converting locations (NC, NV and TN) and an injection-molding plant. Purchase price undisclosed
 WYNNCHURCH CAPITAL		Nov. 2022	<ul style="list-style-type: none"> Dunn Paper, renamed BiOrigin Specialty Products upon consummation of the transaction, produces tissue and machine-glazed specialty papers at six mills with 270,000 tons of annual capacity. Applications including standard tissue/towel, absorbent products, medical grades, colored tissue, foodservice and standup pouch papers, filtration products and tape base. Transaction involved debt to equity conversion after prior ownership by Arbor Investments
		Nov. 2022	<ul style="list-style-type: none"> Sonoco acquired JV partner WestRock's 65% interest in RTS Packaging which converts paperboard partitions, folding cartons and other products at 15 locations (11 US, 2 Mexico, 2 South America). Transaction included WestRock's 140,000 ton uncoated recycled board mill in Chattanooga, TN, which supplied RTS. Purchase price of \$330 million
	 Eaton, IN and Aurora, IL Mills	Nov. 2022	<ul style="list-style-type: none"> Eaton, IN and Aurora, IL mills produce uncoated recycled paperboard (URB) with combined annual capacity of 96,000 tons. Purchase price of \$50 million, 50% in cash and 50% seller financing. With the two Nov. 2022 transactions, WestRock largely exits URB other than a gypsum board JV



2022 Mill Transactions (Cont'd.)

2022 featured 10 sector transactions primarily in packaging, specialty papers, pulp and tissue. The two largest transactions were Paper Excellence's acquisition of Resolute Forest Products and the SWM / Neenah merger that formed Mativ

Acquiror	Target	Announced	Target / Transaction Description
		Oct. 2022	<ul style="list-style-type: none"> Crown Paper includes the Port Townsend, WA mill, with approximately 266,000 tons of containerboard and kraft paper capacity as well as 95,000 tons of unbleached kraft pulp capacity. The company also operates two corrugated converting plants in British Columbia. Purchase price undisclosed
		July 2022	<ul style="list-style-type: none"> Resolute Forest Products produces market pulp (1.3 million metric tons annual capacity), newsprint and publication papers (1.6 million metric tons), tissue (128,000 tons) and lumber (2.9 billion board feet). Purchase price of approximately \$2.6 billion
		May 2022	<ul style="list-style-type: none"> The Kamloops mill has capacity to produce 408,000 annual metric tons of NBSK pulp. The sale was required by regulatory authorities as a condition of Paper Excellence's acquisition of Domtar. Purchase price of \$243 million
		Apr. 2022	<ul style="list-style-type: none"> Pixelle produces specialty papers at four mills in OH, PA, WI and ME with annual capacity of over 1 million tons. Purchase price undisclosed









2022 Mill Transactions (Cont'd.)

2022 featured 10 sector transactions primarily in packaging, specialty papers, pulp and tissue. The two largest transactions were Paper Excellence's acquisition of Resolute Forest Products and the SWM / Neenah merger that formed Mativ

Acquiror	Target	Announced	Target / Transaction Description
		Mar. 2022	<ul style="list-style-type: none"> • SWM and Neenah combined in an all-stock merger under which SWM's shareholders would hold 58% of the new company shares and Neenah shareholders 42%. The new company was subsequently renamed Mativ. The transaction valued Neenah at a 7% premium to its closing share price the day prior to announcement and an enterprise value of \$1.2 billion. The transaction implied a \$3.3 billion combined enterprise value of Mativ. Neenah produces specialty papers for a range of technical applications as well as premium communication papers and packaging. SWM produces specialty materials (films, non-wovens, foams, netting and tapes) for a range of applications and engineered papers, primarily for cigarettes
		Feb. 2022	<ul style="list-style-type: none"> • Midwest Paper is a manufacturer and distributor of recycled containerboard, natural kraft & bleached packaging, and printing & writing grades. Midwest Paper has capacity to make 500,000 tons annually on three machines at its Combined Locks, WI, mill. Purchase price of \$204 million

2021 Mill Transactions

There has been significant transaction activity involving pulp, paper and paper packaging mills since the beginning of 2017. While the acquirors have been strategic buyers for the most part, private equity activity picked up in 2021

Acquiror	Target	Announced	Target / Transaction Description
 BILLERUDKORSNÄS	 VERSO	Dec. 2021	<ul style="list-style-type: none"> Verso is a manufacturer of coated papers as well as pulp. Two operating mills in MI with 1.4 million annual tons of capacity plus the idled Wisconsin Rapids mill. BillerudKorsnäs intends to invest approximately \$1 billion to convert the Escanaba mill to produce 1.2 million annual tons of paperboard. Purchase price of \$693 million plus \$308 million of assumed unfunded pension liabilities
 NORDIC PAPER	 GLASSINE CANADA INC.	Dec. 2021	<ul style="list-style-type: none"> Glassine Canada is a Quebec based manufacturer of specialty papers with grades including baking pan liners, bacon layout paper, tube winding paper and cupstock. The Company had average annual sales of \$27 million over the prior 3 years with an EBITDA margin of approximately 29%. Purchase price of between \$62 and \$71 million depending upon full year 2021 financial performance
 WYNNCHURCH CAPITAL	 APPVION	Dec. 2021	<ul style="list-style-type: none"> Appvion produces specialty and high-performance coated products with a focus on direct thermal paper and film offerings as well as fiber-based consumer and industrial packaging. Purchase price undisclosed
 Blackstone	 SUSTANA	Dec. 2021	<ul style="list-style-type: none"> Sustana produces bleached recycled pulp at facilities in QC and WI and specialty papers at a facility in QC. Purchase price undisclosed

2021 Mill Transactions (Cont'd.)

There has been significant transaction activity involving pulp, paper and paper packaging mills since the beginning of 2017. While the acquirors have been strategic buyers for the most part, private equity activity picked up in 2021

Acquiror	Target	Announced	Target / Transaction Description
		Sep. 2021	<ul style="list-style-type: none"> Jackson Paper operates a 115,000 annual ton recycled corrugating medium mill in Sylva, NC and two corrugated sheet feeders in Dalton, GA and Morganton, NC. Purchase price undisclosed
		Jul. 2021	<ul style="list-style-type: none"> APC Paper Group manufactures recycled kraft paper at mills in Claremont, NH and Norfolk, NY with combined capacity of 100,000 annual tons. The purchase represents a backward integration for packaging converter ProAmpac, making it the only integrated North American producer of bag grades. Purchase price undisclosed
		May 2021	<ul style="list-style-type: none"> Verso's Duluth, MN mill produced supercalendered printing papers and recycled pulp until its indefinite closure in June 2020. ST Paper acquired the mill for the purpose of converting it to tissue paper production. Purchase price of \$7 million
		May 2021	<ul style="list-style-type: none"> Domtar is the largest North American producer of uncoated freesheet papers with 2.2 million tons of capacity at 7 mills and a significant producer of market pulp with 2.1 million metric tons of capacity, primarily at 4 dedicated pulp mills. Domtar is also in the process of converting its shut Kingsport, TN mill to produce 600,000 tons of recycled containerboard. Purchase price of approximately \$3 billion





2021 Mill Transactions (Cont'd.)

There has been significant transaction activity involving pulp, paper and paper packaging mills since the beginning of 2017. While the acquirors have been strategic buyers for the most part, private equity activity picked up in 2021

Acquiror	Target	Announced	Target / Transaction Description
		April 2021	<ul style="list-style-type: none"> AllRise Capital acquired the former Ponderay Newsprint mill in Usk, WA in a Chapter 7 bankruptcy auction. AllRise has indicated its intention to convert the site, which had ceased newsprint operations in June 2020, to recycled packaging papers production and cryptocurrency mining. Purchase price of \$18.1 million
	 Sawmill Assets and Kapuskasing Newsprint Mill	April 2021	<ul style="list-style-type: none"> Primary assets are 7 sawmills (one idle) in Ontario and Quebec with 905 MMBF of lumber capacity. Acquisition includes the 205,000 annual metric ton Kapuskasing, ON newsprint mill. Purchase price of approximately \$214 million plus \$6 million five year chip offset credit note
	 APPVION Carbonless Rolls and Security Papers Business	Feb. 2021	<ul style="list-style-type: none"> Sale includes the business but no manufacturing assets. Appvion previously produced carbonless rolls at the 137,000 annual ton Roaring Spring, PA paper mill and announced it will shut down the facility in conjunction with the transaction. Pixelle produces carbonless rolls at its Chillicothe, OH mill. Purchase price not disclosed









2020 Mill Transactions

There has been significant transaction activity involving pulp, paper and paper packaging mills since the beginning of 2017. 2020 activity was limited to special situations transactions

Acquiror	Target	Announced	Target / Transaction Description
Green Shield Limited, LLC	FiberCorr Mills, LLC	Dec. 2020	<ul style="list-style-type: none"> FiberCorr operates a corrugated packaging facility in Massillon, OH including a 90,000 ton recycled corrugating medium mill, a corrugator installed in 2019 with 840 MMSF of annual capacity and a single face corrugator with 180 MMSF of annual capacity. Acquired for \$6.8 million in a Section 363 sale under Chapter 11 bankruptcy
		Nov. 2020	<ul style="list-style-type: none"> Gorham Paper & Tissue and White Mountain Tissue historically produced tissue and away-from-home towel on two paper machines at the Gorham, NH mill. Going forward, the buyer anticipated operating only the tissue machine, with capacity of 36,000 tons. Acquired for approximately \$13 million in a Section 363 sale under Chapter 11 bankruptcy
	 White Pigeon, MI Mill	June 2020	<ul style="list-style-type: none"> The White Pigeon, MI mill had capacity to produce 70,000 tons of coated recycled board. Graphic Packaging shut the mill in June 2020. Ox Industries acquired the facility to convert it to produce 80,000 tons of uncoated recycled board





2019 Mill Transactions

There has been significant transaction activity involving pulp, paper and paper packaging mills since the beginning of 2017. Prior to 2021, the acquirors were primarily strategic buyers

Acquiror	Target	Announced	Target / Transaction Description
 <p>INDUSTRIAL OPPORTUNITY PARTNERS</p>	 <p>MIDWEST PAPER GROUP</p>	Dec. 2019	<ul style="list-style-type: none"> Midwest Paper is a manufacturer and distributor of recycled containerboard, natural kraft & bleached packaging, and printing & writing grades. Midwest Paper has capacity to make 450,000 tons annually on three machines at its Combined Locks, WI, mill. Purchase price undisclosed
 <p>pixelle SPECIALTY SOLUTIONS™</p>	 <p>VERS^o.</p> <p>Jay, ME and Stevens Point, WI Mills</p>	Nov. 2019	<ul style="list-style-type: none"> Verso's Androscoggin mill in Jay, ME has the capacity to produce 425,000 tons annually of flexible packaging papers, release liner base, specialty labels, and kraft linerboard and kraft paper. The Stevens Point mill has capacity of 210,000 tons per annum of coated flexible packaging papers, release liner base, thermal papers, and other specialty labels. Purchase price of \$400 million
 <p>sappi</p>	 <p>RAYONIER Advanced Materials.</p> <p>Matane, QC Pulp Mill</p>	Aug. 2019	<ul style="list-style-type: none"> Rayonier Advanced Materials' Matane, QC high-yield/BCTMP hardwood pulp produces 270,000 metric tons annually. Purchase price of \$175 million
 <p>Graphic Packaging INTERNATIONAL</p>	 <p>ARTISTIC CARTON COMPANY MAKING THE INSIDE COUNT.</p>	July 2019	<ul style="list-style-type: none"> Artistic Carton consists of the White Pigeon Paper coated recycled paperboard mill in southwest Michigan, with annual production capacity of 70,000 tons, and two Midwest converting facilities. Purchase price of \$50 million

2019 Mill Transactions (Cont'd.)

There has been significant transaction activity involving pulp, paper and paper packaging mills since the beginning of 2017. Prior to 2021, the acquirors were primarily strategic buyers

Acquiror	Target	Announced	Target / Transaction Description
		July 2019	<ul style="list-style-type: none"> Orchids Paper is a producer and converter of recycled and virgin tissue products with parent roll and converting capacity of 110,000 tons and 114,000 tons per annum at facilities in Pryor, OK and Barnwell, SC. Purchase price of \$207 million; acquired through a bankruptcy sale process
		May 2019	<ul style="list-style-type: none"> Corenso Holdings America is a leading U.S. manufacturer of uncoated recycled paperboard (URB) and high-performance cores. Corenso operates a 108,000 ton per year uncoated recycled paperboard mill in WI as well as converting facilities in Wisconsin Rapids, WI and Richmond, VA. Purchase price of \$110 million








2018 Mill Transactions

There has been significant transaction activity involving pulp, paper and paper packaging mills since the beginning of 2017. Prior to 2021, the acquirors were primarily strategic buyers

Acquiror	Target	Announced	Target / Transaction Description
 <p>GREIF PACKAGING SUCCESS TOGETHER™</p>	 <p>Caraustar®</p>	Dec. 2018	<ul style="list-style-type: none"> Caraustar produces coated and uncoated paperboard and specialty paperboard products, folding cartons and set-up boxes. The Company operates 12 paperboard mills and 52 converting plants (45 industrial and 7 consumer) throughout the North America. Purchase price of \$1.8 billion
 <p>LONG FALLS PAPERBOARD</p>	 <p>N NEENAH</p> <p>Brattleboro, VT Mill</p>	Nov. 2018	<ul style="list-style-type: none"> Neenah’s Brattleboro, VT single machine paperboard mill manufactured products for the office products market and other specialty applications. Neenah had announced its intent to shut the facility if it could not locate an operator acquiror. Purchase price of \$5 million
 <p>NEW INDY</p>	 <p>resolute Forest Products</p> <p>Catawba, SC Mill</p>	Oct. 2018	<ul style="list-style-type: none"> Resolute’s Catawba, SC paper and pulp mill produces coated papers and market pulp with total annual capacity of 546,000 tons. New Indy Containerboard intends to convert some output to high-quality, virgin, ultra-lightweight linerboard. Purchase price of \$300 million
 <p>OX INDUSTRIES</p>	 <p>CSP</p>	Oct. 2018	<ul style="list-style-type: none"> Carthage Specialty Paperboard in New York has annual capacity of 60,000 tons, producing uncoated recycled specialties for picture framing, pharmaceutical cap closures, rigid and folding cartons, and other applications. Purchase price of \$10 million; acquired through a bankruptcy sale process









2018 Mill Transactions (Cont'd.)

There has been significant transaction activity involving pulp, paper and paper packaging mills since the beginning of 2017. Prior to 2021, the acquirors were primarily strategic buyers

Acquiror	Target	Announced	Target / Transaction Description
		Oct. 2018	<ul style="list-style-type: none"> Catalyst Paper operates three pulp and paper mills in British Columbia total capacity of 1.3 million tons/yr of NBSK market pulp and paper products including coated mechanical grades, directory paper, newsprint, industrial packaging and food service papers. Purchase price undisclosed
	Old Town, ME Pulp Mill (OTM Holdings)	Oct. 2018	<ul style="list-style-type: none"> The Old Town mill, with annual capacity of 155,000 metric tons of market pulp, had been idle since 2015. ND Paper acquired the facility with plans to produce 275,000 annual metric tons of unbleached softwood pulp. Purchase price undisclosed
	 Ladysmith, WI Mill	Aug. 2018	<ul style="list-style-type: none"> Clearwater Paper's Ladysmith, WI mill has capacity of 53,000 tons annually on two machines, producing recycled-content tissue parent rolls. Purchase price of \$72 million
	 Specialty Papers	Aug. 2018	<ul style="list-style-type: none"> Glatfelter's Specialty Papers Business Unit produces a range of specialty paper grades at mills in PA and OH with total capacity of 735,000 annual tons. Purchase price of \$360 million







2018 Mill Transactions (Cont'd.)

There has been significant transaction activity involving pulp, paper and paper packaging mills since the beginning of 2017. Prior to 2021, the acquirors were primarily strategic buyers

Acquiror	Target	Announced	Target / Transaction Description
 <p>Global Win / Shanying International</p>	 <p>Wickliffe, KY Mill</p>	Aug. 2018	<ul style="list-style-type: none"> Verso's Wickliffe, KY mill had manufactured coated and uncoated paper as well as market pulp with total capacity of 285,000 tons. The mill had been idle since August 2015. Global Win Corp., a subsidiary of Shanying International, announced plans to invest \$150 million to enable the mill to produce pulp and brown paper packaging. Purchase price of \$16 million
 <p>ND PAPER</p>	 <p>Fairmont, WV Mill</p>	Aug. 2018	<ul style="list-style-type: none"> Resolute's Fairmont, WV recycled bleached kraft pulp mill has capacity of 218,000 tons per annum. Purchase price of \$55 million
 <p>AHLSTROM MUNKSJÖ</p>	 <p>EXPERA specialty solutions™</p>	July 2018	<ul style="list-style-type: none"> Expera Specialty Solutions produces specialty papers including unbleached and bleached food packaging, release liner / label papers, and technical/ industrial products such as backings, barriers and tape. Its four paper mills have combined capacity of 560,000 tons per annum. Purchase price of \$615 million
 <p>ND PAPER</p>	 <p>Rumford, ME and Biron, WI Mills</p>	May 2018	<ul style="list-style-type: none"> Catalyst's mills in Rumford, ME and Biron, WI have annual capacity of 980,000 tons of coated papers and, at Rumford, 120,000 metric tons of market pulp. Purchase price of \$175 million









2018 Mill Transactions (Cont'd.)

There has been significant transaction activity involving pulp, paper and paper packaging mills since the beginning of 2017. Prior to 2021, the acquirors were primarily strategic buyers

Acquiror	Target	Announced	Target / Transaction Description
		May 2018	<ul style="list-style-type: none"> Conitex Sonoco is a vertically integrated manufacturer of paper-based cones and tubes for the textile industry. Sonoco acquired the remaining 70% interest in the joint venture for \$133 million in cash
	 Pine Bluff, AR Mill	April 2018	<ul style="list-style-type: none"> Mondi's Pine Bluff, AR mill produces multiwall, converting, and grocery bag unbleached papers with an annual capacity of 140,000 tons. Purchase price undisclosed
		Jan. 2018	<ul style="list-style-type: none"> KapStone is a leading producer of containerboard, corrugated products and kraft/specialty papers. It operates four mills with 3 million tons of production capacity, 23 corrugating converting facilities and a packaging distribution business with 60 locations. Purchase price of \$4.9 billion in cash, stock and assumed debt







2017 Mill Transactions

There has been significant transaction activity involving pulp, paper and paper packaging mills since the beginning of 2017. Prior to 2021, the acquirors were primarily strategic buyers

Acquiror	Target	Announced	Target / Transaction Description
		Dec. 2017	<ul style="list-style-type: none"> Crane Currency operates a currency papers production facility (2 paper mills) in Dalton, MA, a currency security thread manufacturing facility in Nashua, NH, a banknote papers production facility in Sweden and a banknote printing facility in Malta. Purchase price of \$800 million
	 North America Consumer Packaging	Oct. 2017	<ul style="list-style-type: none"> International Paper's North America Consumer Packaging business operates two U.S. coated bleached paperboard mills with 1.2 million tons three U.S. converting facilities, and one U.K. converting facility. Graphic Packaging assumed \$660 million in debt as part of the agreement
		Sept. 2017	<ul style="list-style-type: none"> Appleton Coated had capacity to produce 400,000 tons of paper on three paper machines with off-line coating capacity of 280,000 tons. The mill had historically produced coated and uncoated papers, and recently entered the containerboard market. Acquired for \$21.5 million in a receivership auction. Mill was in a "hot idle" state at the time of purchase
		June 2017	<ul style="list-style-type: none"> Interstate Resources manufactures containerboard at two mills, Riceboro, GA (kraft linerboard, 373,000 tons of annual capacity) and Reading, PA (recycled medium, 207,000 tons of annual capacity). The Company also operates 12 corrugated converting facilities in the Eastern US. DS Smith acquired an 80% stake at an enterprise value of \$1.4 billion

2017 Mill Transactions (Cont'd.)

There has been significant transaction activity involving pulp, paper and paper packaging mills since the beginning of 2017. Prior to 2021, the acquirors were primarily strategic buyers

Acquiror	Target	Announced	Target / Transaction Description
		May 2017	<ul style="list-style-type: none"> Publicly traded producer of dissolving pulp, specialty chemicals, paper pulp, bleached board, newsprint and lumber with operations primarily in Eastern Canada (one dissolving pulp mill in France, one US chemicals facility). Combined annual capacity of 1.3 million tons per year. Purchase price of \$807 million
		March 2017	<ul style="list-style-type: none"> Millar Western is an Alberta, Canada producer of market pulp (BCTMP) at one mill with 320,000 metric tons of annual capacity and two softwood lumber mills (one co-located with the pulp mill). Transaction involved debt exchange (45% reduction of the prior principal of US\$210 million), with private equity investor Atlas Holdings further exchanging its new debt for an 80% equity stake
	 Port Angeles, WA Mill	March 2017	<ul style="list-style-type: none"> Nippon Paper's Port Angeles mill had capacity to produce 165,000 annual tons of uncoated groundwood and unbleached bag papers on two machines. It shut down in January 2017, operating only a single 100,000 ton machine prior to the shut. BioPappel acquired the mill intending to convert to 220,000-260,000 tons of containerboard and specialty packaging papers production. Purchase price of \$20.6 million